

GOVERNMENT OF INDIA TARIFF COMMISSION

REPORT

ON

The Continuance of Protection to the Electric Motor Industry



BOMBAY 1961

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Report on the Continuance of
Protection to the Electric
Motor Industry—1961.



CONTENTS

PARA.		PAGE
1	Previous tariff inquiries	1
2	Present inquiry	1
. 3	Method of inquiry	1
4	Implementation of Commission's recommendations in its fast Report	2
5	Scope of the inquiry	3
- 6	Progress and present position of the industry	3
7	Domestic demand	5
8	Raw materials	7
9	Quality of the domestic product	11
10	Existing rates of duty	12
11	Imports and import control policy	13
12	Exports	15
13	Commission's estimates of costs of production and fair ex-works prices	15
14	Comparison of the estimated fair ex-works prices of indigenous electric motors with the landed costs without duty of imported motors	21
15	Continuance of protection	24
16	Modifications to the Indian Customs Tariff Schedule	25
17	Selling arrangements and selling prices	26
18	Summary of conclusions and recommendations	26
19	Acknowledgements	28
4	APPENDICES	
APPX.		
1	List of firms/associations/Government Departments to whom questionnaires/letters were issued and from whom replies or memoranda were received	29
11	List of electric motor manufacturing and other factories visited by the Commission and its officers.	35
111	List of persons who attended the public inquiry on 28th February, 1961	37

(viii)

APPX.		PAGE
IV	Statement showing the present annual installed capacity of electric motor manufacturing units	40
V	Statements showing production of electric motors during 1958, 1959 and 1960 (January-October)	42
VI	Statement showing rates of excise duty on electric motors and parts thereof	50
VII	Summary of import control policy for the different types of electric motors and their parts since the licensing period October, 1958—March, 1959	54



GOVERNMENT OF INDIA MINISTRY OF COMMERCE AND INDUSTRY

New Delhi, the 26th October, 1961.

NOTIFICATION

Tariffs

No. 11(1)-T.R./61.—In exercise of the powers conferred by subsection (1) of section 3A of the Indian Tariff Act, 1934 (32 of 1934), as in force in India and as applied to the State of Pondicherry, the Central Government hereby directs that with immediate effect there shall be levied on the articles specified in column (1) of the Table hereto annexed, when imported into India or the said State, a duty of customs of such amount as is specified in the corresponding entry in column (2) thereof.

THE TABLE

Name of article

Amount of duty of customs [inclusive of the duty chargeable under sub-section (1) of section 2 of the Indian Tariff Act, 1934]

2

A Wardi Pi

The component parts of following electric motors but excluding control gear for the same:

- 20 per cent ad valorem
- (i) squirrel cage induction motors and slip ring motors above 100 but not exceeding 500 brake-horse-power;

1

- (ii) single phase motors of a brake-horse-power not exceeding 3 but not less than one brakehorse-power;
- (iii) fractional horse-power-motors (other than squirrel cage induction motors) of not less than one-quarter of one brake-horse-power;

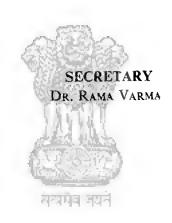
provided that only such articles shall be deemed to be component parts as are essential for the working of the electric motors and have been given for that purpose some special shape or quality which would not be essential for their use for any other purpose.

B. N. ADARKAR,

Joint Secretary to the Government of India.

PERSONNEL OF THE COMMISSION

SHRI K. R. P. AIYANGAR	•	•	•	Chairman
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GOVERNMENT OF INDIA

MINISTRY OF COMMERCE AND INDUSTRY

New Delhi, the 26th October, 1961

RESOLUTION

Tariffs

No. 11(1)-T.R./61.—The Tariff Commission has submitted its Report on the continuance of protection to the Electric Motor Industry on the basis of an inquiry undertaken by it under Sections 11(e) and 13 of the Tariff Commission Act, 1951. Its recommendations are as follows:—

- (1) Protection to the electric motor industry should be continued for a further period of two years ending 31st December, 1963. Protection should cover (i) squirrel cage and slip ring motors of 1 to 500 h.p., (excluding variable speed commutator motors), (ii) single phase motors of 1 to 3 h.p., (iii) fractional h.p. motors, and (iv) component parts of the above mentioned motors.
- (2) The protective duty applicable to squirrel cage and slip ring motors of 1 to 500 h.p., (excluding variable speed commutator motors), single phase motors of 1 to 3 h.p. and fractional h.p. motors of not less than \(\frac{1}{4} \) h.p. should be 15 per cent ad valorem.
- (3) The protective duty on component parts of the electric motors mentioned in recommendation (2) above should be 20 per cent ad valorem.
- (4) The existing revenue duty of 35 per cent ad valorem on fractional h.p. motors of less than \(\frac{1}{4} \) h.p. and component parts of such motors should be converted into an equivalent protective duty.
- (5) Government should give all possible assistance to the electric motor industry to work double shift especially by ensuring adequate supply of raw materials.
- (6) Government should encourage the manufacturers of electric motors to use aluminium cast rotors and for this purpose assist the industry to procure the necessary equipment.
- (7) Government should carefully assess the demand for fractional h.p. motors and production capacity of the industry in both sectors for manufacture of such motors before issuing import licences.

- (8) Government should take steps to enable the electric motor industry to shorten its delivery periods by allowing imports of necessary raw materials or otherwise.
- (9) The Development Commissioner for Small Scale Industries, in consultation with the Directors of Industries in the States, should take necessary steps to improve the present arrangements for distributing raw materials to the small scale units.
- (10) Steps to establish additional capacity for the manufacture of stampings should be expedited.
- (11) Manufacturers of electric motors should expedite measures to change over to class 'E' insulation without further delay.
- 2. Government accept recommendations (1) to (4). The duty recommended by the Commission in respect of component parts of Electric Motors not hitherto covered by the scheme of protection is being brought into force with immediate effect by notification published separately in the Gazette of today. The necessary legislation will also be undertaken in due course.
- 3. Government have taken note of recommendations (5) to (9) and steps will be taken to implement them to the extent possible.
- 4. The attention of the manufacturers concerned is invited to recommendations (10) and (11).

ORDER

ORDERED that a copy of the Resolution be communicated to all concerned and that it be published in the Gazette of India.

B. N. ADARKAR.

Joint Secretary to the Government of India.

REPORT ON THE CONTINUANCE OF PROTECTION TO THE ELECTRIC MOTOR INDUSTRY

1. Protection to the electric motor industry has been the subject of inquiry by the Tariff Board or Tariff Commission four times since 1948. During the first period of three years of

Previous tariff inquiries 1948. During the first period of three years of protection the protective duty was 10 per cent advalorem and covered all categories of motors and their component parts. The range of pro-

tection for the second period was limited to motors of 1 to 20 hp. only and the protective duty recommended at 10 per cent ad valorem till 1955. For the next two periods, covered by our reports of 1955 and 1958, the protective duty was fixed at 15 per cent ad valorem and covered squirrel cage motors of $\frac{1}{4}$ to 100 h.p. and slip ring motors of 1 to 100 h.p. excluding flame proof motors and variable speed commutator motors. In 1954, the protective duty on components was, however, increased to 20 per cent ad valorem.

- 2. Protection granted to the electric motor industry is due to expire on 31st December, 1961. The present inquiry was undertaken by us in pursuance of Section 11(e) read with Section 13 of the Tariff Commission Act, 1951 which empowers us to inquire into and report on any further action required in relation to the protection granted to an industry with a view to its increase, decrease, modification or abolition according to the circumstances of the case.
- 3.1. Questionnaires were sent to producers, importers and consumers of electric motors on 22nd November, 1960. A press communique was also issued on the same day inviting those interested in the inquiry to obtain Method of inquiry copies of the relevant questionnaires and furnish replies. The Development Wing was requested to furnish a memorandum on the present position of the industry. The Development Commissioner, Small-Scale Industries was requested to furnish information regarding the small-scale sector of the industry. The Directors of industries in the States where the electric motor manufacturing units are located were addressed for information regarding, inter alia, the availability of raw materials and assistance, if any, rendered by them to this industry. All the State Governments were requested to give their views on the question of continuance of protection to the industry. Memoranda were also called for from the Indian Electrical Manufacturers' Association, Calcutta and the Small-Scale Electric Motor Manufacturers' Association, Bombay. Information regarding c.i.f. prices and landed costs of imported electric motors was called for from principal importers and the Collectors of Customs at the ports. Letters were

issued to the Iron and Steel Controller, the Director General of Supplies and Disposals, the National Physical Laboratory, the Central Mining Research Station, the Government Test House, the Indian Standards Institution and the manufacturers of principal raw materials asking for information on specific points. A list of those to whom questionnaires/letters were issued and from whom replies or memoranda were received is given in Appendix I.

- 3.2. We visited a few large-scale and also small-scale units manufacturing electric motors. Our Cost Accounts Officers undertook the examination of cost of production of electric motors at three factories. A list of the factories visited by us and by our Officers is given in Appendix II.
- 3.3. A public inquiry into this industry was held on 28th February, 1961 at the Commission's Office in Bombay. A list of those who attended the public inquiry is given in Appendix III.
- 4. In our last report (1958) we made two recommendations on matters other than protection. The recommendations and the action taken tehreon are given below:

Recommendation 1

"Positive steps should be taken to encourage the indigenous manufacture of motors of ratings of 100 h.p. and above by requiring indentors of electric motors to estimate their requirements sufficiently in advance and plan their orders on domestic manufacturers. The Development Wing should before recommending the issue of a licence satisfy itself that the applicant had taken adequate measures to obtain these requirements from indigenous sources."

The Development Wing has informed us that applications for imports are examined carefully and are recommended only when it is satisfied that deliveries quoted by indigenous manufacturers are inconveniently long even when indents are made sufficiently in advance of actual need. The producers on their part point out that long deliveries are caused by their inability to obtain raw materials in time particularly stampings which require extensive and expensive tooling for the bigger sizes of motors.

Recommendation 2

"The manufacturers of electric motors should publish the list prices of 1 to 15 h.p. motors in English and regional languages every half year, notifying every change in the list price and take positive steps to see that every dealer of their motors in the above categories displays the list prices at his premises in a conspicuous manner."

The producers report that they are issuing price lists in English and regional languages once in six months or whenever there are changes in list prices.

- 5.1. The existing scheme of protection covers squirrel cage induction motors of brake-horse-power not exceeding 100 and not below \(\frac{1}{4} \) and slip ring motors of brake-horse-power not exceeding 100 and not below 1 and excludes flame-proof motors and variable speed commutator motors. In connection with the present inquiry, we received suggestions for extending protection to motors above 100 h.p. from several quarters including the Development Wing. The Indian Electrical Manufacturers' Association has pleaded that orders for motors up to 1000 h.p. should be placed only with domestic producers.
- 5.2. This matter was discussed at length at the public inquiry. It was noted that since the last inquiry the industry has made significant progress in the production on the one hand of single phase and fractional h.p. motors and on the other hand of motors above 100 h.p. and achieved further diversification of its production. Some producers have actually executed orders for motors up to about 500 h.p. and many units in the industry are geared to take up the manufacture of motors of still higher horse power. There was a general desire that the scope of the inquiry should be enlarged. After taking into account all factors we have therefore decided that the inquiry should cover squirrel cage and slip-ring motors up to and including 500 h.p., inclusive of flame-proof motors. We have also decided to include single phase motors up to and including 3 h.p. and fractional h.p. motors within the scope of our inquiry.
- 6.1. In 1958, there were 15 units in the large scale sector with a single shift capacity of 600,000 h.p. In 1960, the units in this sector have increased to 27 with a capacity of 1,136,040 h.p. on single shift. Figures of individual capacities are given in Appendix IV. An additional capacity of 821,900 h.p. has been sanctioned which includes establishment of 25 new units.

स्थानेन नगर्न

6.2. In the small scale sector, the Development Commissioner had reported 31 units with a capacity of 130,000 h.p. in 1958. According to the Development Commissioner, the number of units registered with him rose to 74 in 1959 with a capacity of 266,000 h.p. and employment of 2,890 persons. This information is based on a survey undertaken in 1959. Sankey Electrical Stampings Private Ltd. have however furnished a long list of buyers of stampings for electric motors. We suggest that the Development Commissioner in consultation with State Departments of Indusries should verify the position.

6.3. The production of electric motors in recent years in the large scale sector as intimated by the Development Wing and in the small scale sector as intimated by the Development Commissioner: is given below:

	*2				Large S	Scale	[?] Sma	ill Scale
	Yea	ır 			 No.	H.P.	No.	H.P.
1958			•	-	100,372	641,083	N.A.	51,533
1959					95,113	592,049	N.A.	70,064
1960 (J	anOc	ct.)	•		108,235	612,171	N.A.	Not available.

Details of output by the individual large scale manufacturers are given in Appendix V.

6.4. The proportions of different ranges of h.p. within the total production of motors in the large scale sector are stated below:

	1958	%	1959	%	1960 (JanOct.)	%.
Upto 30	581,710	91	502,225	85	514,080	84
Above 30 to 50 H.P	38,065	6_	54,279	9.	50,767	8
Above 50 to below 100 H.P.	18,193	3 3 HAA	28,060	5	37,549	6
100 H. P. and above	3,115		7,485	1	9,775	2
Total	641,083	100	592,049	100	612,171	100

While the bulk of the production continues to be under 30 h.p. it is noticeable that production of motors of higher ratings shows an upward trend and manufacture of motors of progressively higher h.p. has been attempted. It is also noted that there was a fall in production in 1959 which has since recovered in 1960.

6.5. From our observation as well as the discussion which took place at the public inquiry, it is clear that the industry both in the large and in the small scale sectors has made substantial progress in the manufacture of fractional h.p. motors. However, we received complaints from small scale producers that their production and progress have recently suffered a setback on account of large imports from abroad. This subject is further discussed in paragraph 11.3.

- 6.6. Diversification.—At the time of the last inquiry in 1958, only Crompton Parkinson claimed to produce motors for cranes, multi-speed motors, special spinning frame motors, acid proof motors and motors of class B insulation. Since then these motors figure in the production of several other producers. Certain units in the industry have plans for the immediate future to embark on the manufacture of flame-proof and explosion-proof motors, multi-speed pole changing motors, variable speed commutator motors, synchronous motors, motors for sugar centrifuges and other special motors. This trend towards increased diversification is explained by the difficulties caused by the fall in demand for the common type of motors during the years 1958 to 1960, growing competition from the small scale sector and rising demand in the country for various kinds of motors to suit special requirements.
- 6.7. As stated above, the present installed capacity of 27 units is 1,1 36,040 h.p. We are informed that sanction has been given to 6 of these units to expand their capacity by 460,000 h.p. Of the 25 new units, licences have been granted to 23 and approved in the case of 2 units with a total capacity of 361,900 h.p. When all these expansion schemes materialise the total capacity of the industry will rise to 1.96 million h.p. on single shift. The above figures of capacity do not include that of Heavy Electricals Ltd., Bhopal. The manufacturing programme of that unit includes A.C. industrial motors above 200 h.p. and up to 5500 h.p. with a production target of 460 units annually totalling 300,000 h.p. In addition it will also manufacture D.C. traction motors, D.C. industrial motors and flame proof motors for mining and oil industry. It is expected to commence manufacture of motors in the third quarter of 1963 and attain its production targets only by 1967-68.
- 7.1. In 1958, we estimated the domestic demand for electric motors **Domestic demand** for that year at 750,000 to 800,000 h.p. and expected it to rise from 800,000 to 1,000,000 h.p. in 1961.
- 7.2. In estimating the domestic demand for the year 1960 and the next three years, we took into account the estimates received from the Development Council for Heavy Electrical Industry, the Development Wing, the Indian Electrical Manufacturers' Association and some producters. For the year 1960, the total availability of motors, as indicated by production and imports for the January-October period, was running at the annual rate of one million h.p. As the general consensus of opinion at the public inquiry was that there was no evidence of unsatisfied demand or accumulation of stocks during those months, we concluded that the current domestic demand may be placed at one million h.p.
- 7.3. For future demand, it will be rational to estimate the requirements of electric motors in terms of horse power for industrial uses on the basis of generation of power as projected for the Third Five Year

Plan. The targets envisaged for additional generation of power in each year are given below:

Year		 		···		······································					Million K.W.
1961-62						•					1.0
1962-63											1.0
1963-64	•								•		1.2
1964-65								•		•	1.3
1965-66			٠		•	•	٠	٠		•	1.5

For estimating the requirements of motor horse power from these targets of power generation, the Development Council proceeded on the assumption that 50 per cent of the power generated in any year will be available for industries operating with motors and that the load-factor will be 40 per cent. On this basis, it arrived at the result that 1.66 million h.p. will be necessary for every one million k.w. of additional power generated. We have compared this factor 1.66 adopted by the Development Council with the ratio of availability of motor h.p. to additional electric power generated in each of the three years 1956-57 to 1958-59 and find that the factor has stood approximately at 1.86, 2.13 and 2.58 respectively. This disparity was discussed at length at the public inquiry. There was a general agreement that the factor adopted by the Development Council is an under-estimate and that it would be more realistic to adopt at least 2.0 as the required factor.

- 7.4. With 1.3 million k.w. as the approximate additional power to be generated in 1964, the above stated factor indicates motor h.p. requirements for that year at 2.6 million h.p. We have already pointed out above that with the expansion schemes sanctioned till now for the large scale sector the total single shift capacity contemplated for the industry for the near future is 2 million h.p. If it turns out as reported that the Third Five Year Plan target of installed capacity of 11.8 million k.w. is itself raised to 13.4 million k.w. our estimates of motor horse power requirements will have to be pitched correspondingly higher. The Development Wing has also drawn our attention to the additional requirements of motor horse power as part of machine tools and industrial machinery to be manufactured during the Third Plan which must add to our estimates.
- 7.5. The industry in both large scale and small scale sectors seems capable of meeting the requirements of the country if it works on double shift. Working double shift would firstly result in better utilization of machinery installed in the industry, thereby minimising imports of such machinery as has to be imported from outside and secondly bring in substantial economies in the costs of production. We, therefore, recommend that Government should give all possible assist-

ance to the industry for this purpose especially by ensuring adequate supply of raw materials. We also consider that steps should be taken for planned production of higher horse power motors and as far as possible avenues for utilising indigenous motors even with imported plant and machinery should be explored. A situation may however arise when either some of the licensed capacity is not fully established or the industry inspite of working double shift is not able to meet the country's requirements. Under such circumstances we suggest that Government should carefully watch the situation and license additional capacity if found necessary.

Raw Materials

- 8.1. The raw materials required by the industry are as under:
- 1. Electrical steel stampings
- 2. (a) Synthetic enamel wires
 - (b) Copper strips and cast rings
 - (c) Aluminium ingots
- 3. Steel rods and bars
- 4. Foundry grade pig iron
- 5. (a) Insulating materials
 - (b) Insulating varnishes
- 6. Ball or roller bearings
- Paints and thinners.
- 8. Miscellaneous items such as bolts, nuts, terminal lugs, terminal boards, slip-ring assembly, brush holders, brushes, brazing alloy rods, etc.

We review below the present position of principal raw materials:

8.2.1. Electrical sheet steel and stampings.—The Tata Iron & Steel Co. Ltd. (TISCO) is the only producer of electrical sheet steel required for manufacture of stampings. Its present capacity for this steel is 18,000 metric tonnes and this is interchangeable with that for mild steel sheets. Its actual production for the years 1958 to 1960 has been 11,096, 12,335 and 15,077 tonnes respectively. The company has plans to expand its capacity to 24,000 tonnes by the end of 1961 and is negotiating with Government to raise it to 60,000 tonnes. We understand that there are plans to instal capacity for the manufacture of electrical steel sheets at the Rourkela Steel Plant. TISCO at present delivers its entire output to Sankey Electrical Stampings Private Ltd. who also act as stockists for supply to other customers without charging extra trading commission. TISCO has expressed its willingness to supply others direct if the indent is in wagonload and a proportion in off-grade steel is acceptable. Together with imported steel obtained by Sankeys, the supply position of steel for stampings at present appears satisfactory.

8.2.2. Till recently, Sankey Electrical Stampings Private Ltd. was, except for a small quantity manufactured for their own use by a few units, the only producer of stampings required by this industry. The present capacity of Sankeys on double shift is 4,600 tons and the company has plans for expansion to 6,000 tons by 1962 and 10,000 tons by 1964. Devidayal Stainless Steel Industries Private Ltd. with a sanctioned double shift capacity of 6,000 tons, of which 60 per cent *i.e.*, 3,600 tons is expected to be available for the electric motor industry, is likely to commence production by the middle of 1961. Availability of electrical steel to the industry for the three years 1958 to 1960 (Jan.-Oct.) is given below:

(In metric tonnes)

	Year			Sankey's supply of stampings	Sheets required for stamp- ings in the preceding col.*	Sheets supplied by Sankeys	Total availability s of sheet steel to electric motor in- dustry-col. (3) plus (4)	Total availabi- lity of electric steel in- cluding that for fans, cho- kes, etc.
	1			2	3	3 4	5	6
1958	•			3873	9700	2261	11961	15605
1959			•	2792	7000	2159	9159	13999
1960 (J	anOct	.)	•	3128	7800	1342	9142	14197

On the basis of the average consumption during the last three years 15,000 tonnes of electrical steel sheets or 6,000 tonnes of stampings are required for every one million h.p. of electric motors produced. The requirements of stampings for electric motors by 1964, corresponding to a production of 2.6 million h.p., will amount to 15,600 tonnes and that of steel to 39,000 tonnes. We have also observed that about 50 per cent additional sheets/stampings are at present required for electric fans, chokes, etc. and that the manufacturing capacity for such stampings cannot be distinguished from that for electric motors. Assuming that the ratio of consumption of stampings/sheets between electric motors and other uses remains the same during the next three years the total requirements of stampings during 1964 will be 23,400 tonnes and that of steel to manufacture these stampings 58,500 tonnes.

8.2.3. In the light of these rapidly increasing requirements, the position of sheet steel and stampings for the future would appear to be not free from difficulties. For sheet steel, the capacity of TISCO with the expansion already planned will be 24,000 tonnes as against the demand

^{*}On the basis that for every tonne of stampings 2.5 tonnes of sheet steel is required. [The share of the small-scale sector was 16.1 per cent in 1958, 17.3 per cent in 1959 and 21.6 per cent in 1960 (Jan.-Oct.)].

of 58,000 tonnes. It is clear that the deficit will have to be covered either from imports or from the projected plant at Rourkela and/or the expansion schemes of TISCO. The foreign exchange implications of any such expensive imports of raw materials hardly need to be stressed. The demand for stampings in 1964 will exceed 23,000 tonnes. The existing capacities, on double shift, of Sankeys (4670 tonnes), Devidayal (3660 tonnes) and those few units which manufacture for self consumption are far from adequate to meet the future requirements of the industry. As we have observed elsewhere, any upward revision of our power targets will make the situation more acute. We, therefore, recommend that steps to establish additional capacity for the manufacture of stampings should be expedited.

- 8.2.4. The subject of standardisation of designs of stampings was discussed at length at the last public inquiry and there is some change in the situation. Sankeys offer a certain price inducement in the form of a standardisation rebate in favour of those who are prepared to avail themselves of standardised designs and it is reported that the small scale sector has generally adopted these stampings.
- 8.2.5. The industry reports that the quality of Sankey's stampings is satisfactory. As for prices, some reduction was made in January 1959 inspite of increased prices of domestic and imported steel and a further reduction has been reported since February, 1961. Sankeys had also raised the bulk rebate to its customers in January 1959.
- 8.3. Copper enamel wire.—There are now eight units in the field manufacturing copper enamel wire and the position on the whole has further improved since the last inquiry.
- 8.4. Copper strips, cast rings and aluminium ingots for rotor casting.—Copper strips and cast rings are used for fabrication of rotors for squirrel cage induction motors and are processed indigenously from imported electrolytic copper. In the case of cast rotors indigenous aluminium is used. With five-fold increase in production of aluminium envisaged during the Third Plan period, its availability is expected to improve considerably. Besides this important consideration of indigenous availability of raw material, aluminium cast rotors have also the advantage of reducing the manufacturing cost. It is mainly on the latter consideration, we understand, that producers abroad have been generally making use of aluminium cast rotors for squirrel cage induction motors upto medium sizes which constitute the bulk of indigenous production. Although most producers in this country realise the desirability of adopting the improved practice of using die cast or centrifugal cast aluminium rotors they still adhere to the old practice of fabricating rotors from copper. The former technique requires some extra capital investment which will more than repay itself in economies of production. We recommend that Government should encourage the producers to use aluminium cast rotors and for this purpose assist the industry to procure the necessary equipment for switching over as early as possible to aluminium die cast or centrifugal cast rotors.

- 8.5. Insulating materials.—Insulating materials for slot and intercoil insulation are mostly imported although increasing quantities are available from indigenous sources. Further, capacity for the manufacture of paper based insulating material such as presspan is being established in the country. Impregnating varnishes suitable for 'E' and higher class insulation are already available from indigenous sources.
- 8.6. Ball and roller bearings.—The complaints about the supply and quality of this vital component have not yet ceased. We have in our report on Ball Bearings Industry (1960) drawn attention to the important need for indigenous manufacturers improving quality and expediting supplies.
- 8.7. The position regarding other raw materials and consumable stores continues to be generally satisfactory.
- 8.8. Raw material cost ranges between about 70 to 80 per cent of the ex-works cost of a motor. Of the raw materials used, the indigenous content is generally over 90 per cent.
- 8.9. It was brought out at the public inquiry that for some years now U.S.A., West Germany, U.K. and other advanced countries have switched over to class 'E' insulation as against class 'A' insulation and that this has resulted in economies in materials and reduction in costs. No such change has, however, been introduced in this country even by producers who have foreign technical collaboration. Amongst the reasons advanced by the producers for the delay in switching over to class 'E' insulation were reluctance of consumers to accept motors with this class of insulation which admits of higher temperature rise, non-availability and higher prices of suitable slot and intercoil insulating material, non-inclusion by the I.S.I. of class 'E' insulation in its present specifications with the corresponding absence of standard frame sizes and lack of their experience in the use of class 'E' insulation. These points were discussed at great length during the public inquiry. It was agreed that economies in raw material in the use of class 'E' insulation are substantial and would result in appreciable reduction in costs. We have no doubt that the consumers' resistance could be overcome if the advantage of lower price of electric motors with class 'E' insulation were passed on to the consumers and concrete steps were taken to familiarize them with regard to motors with this class of insulation. As the industry is in any case importing most of its requirements of slot and intercoil insulating material at present, the lack of indigenous availability of such insulating material should not stand in the way of changing over to class 'E' insulation and the incidence of its higher cost would be negligible. Further, with the progressive use of class 'E' insulation it will be natural to assume that the class of material available and to be developed in the country would also be suitable for this class of insulation. As it is, the producers in many cases have not adopted frame sizes at present specified by I.S.I. Besides, we also understand that the I.S.I. is shortly bringing out a revised specification including class 'E' insulation. Lastly, the plea of lack of experience for switching over to

class 'E' insulation would not hold good at least in case of producers who have foreign collaboration. We have carefully gone through the various aspects of the matter and have come to the conclusion that the delay on the part of the producers to adopt progressive designs and techniques is more due to their lack of initiative resulting from a sheltered domestic market enjoyed by them rather than to any of the above considerations. This is a serious matter both in view of the higher prices that the consumers have to pay for indigenous motors and the inability of the industry to enter the export market for earning the much needed foreign exchange. We, therefore, recommend that the producers of electric motors should expedite measures to switch over to class 'E' insulation without further delay.

- 8.10. In the course of the inquiry, representatives of the small scale sector complained of difficulties about the supply and prices of raw materials. It is clear from the rising trend of the share of the small scale sector in the available supplies of stampings that this sector has an expanding role in the electric motor industry. In view of the fact that this industry is particularly well suited for small scale enterprise, we recommend that the Development Commissioner in consultation with the Directors of Industries in the States should take necessary steps to improve the present arrangements of distributing raw materials to the small units.
- 9.1. The quality of the domestic product continues to be satisfactory. The Development Wing reports that it has not received any com-

Quality of the domestic product plaint on the ground of quality. The Director General of Supplies and Disposals and Hindustan Aircraft (Pvt) Ltd. have also testified to the acceptable quality of indigenous motors. The

Bombay Millowners' Association states that the majority of its members is satisfied with the quality and that whatever defects were pointed out by the members were attended to promptly. The defects complained of were bad quality of bearings, poor balancing of rotating parts, etc. The Hindustan Machine Tools Ltd. has expressed the view that the indigenous motors are suitable for general purposes but excessive vibration renders them unsuitable for precision machine tools. The alleged defects were brought to the notice of the manufacturers who have taken measures to rectify these defects.

- 9.2. The Indian Standards Institution has already published three standard specifications for electric motors IS:325—1959 for three phase induction motors; IS:996—1959 for small A.C. and universal electric motors with class 'A' insulation and IS:1231—1958 for dimensions of three phase induction motors. Among other work undertaken to extend the scope of existing specifications, the Institution is working on inclusion of motors of higher output under IS: 325 and motors of class 'E' insulation under IS: 1231.
- 9.3. Five large scale and four small scale units have obtained licenses for the use of the I. S. I. Certification Mark relating to IS: 325. In view of the reluctance of manufacturers to adopt the I. S. I. Certification

Mark on the ground of high marking fees, the Institution has recently announced a revised schedule of marking fees on a slab system and it is hoped that the other producers will now adopt the Certification Mark.

10.1. Protected categories of electric motors and component parts thereof excluding control gear are assessed to duty under Item No. 72 (14) of the First Schedule to the Indian Tariff Act, 1934. The relevant extract from the Schedule is given below:—

Item	Name of article	Nature	Stan- dard	of\d ticle	uty if is the		Duration of protec-
No.		of duty	rate of duty		A British colony	Burm	- tive rates of duty a
1	2	3	4	5	6	7	8
72(14)	(a) The following electric motors, namely, squirrel cage induction motors of a brake-horse-power not exceeding 100 but not less than one quarter of one brake-horse-power and slip ring motors of a brake-horse-power not exceeding 100 but not less than one brake-horse-power; excluding flame proof motors and variable speed commutator motors.		15 per cent ad va- lorem			Free	December 31st, 1961
	(b) Component parts of electric motors as defined in item 72(14)(a), but excluding control gear for the same, provided that only such articles shall be deemed to be component parts as are essential for the working of the electric motors and have been given for that purpose some special shape or quality which would not be essential for their use for any other purpose.	tive .	20 per cent ad va- lorem				December 31st, 1961.

Note.—In addition to the above rates of protective duty, a countervailing import duty equivalent to the excise duty leviable on like articles produced or manufactured in India is levied on imported motors under the provisions of I. C. T. Item No. 73(21).

- 10.2 The rates of excise duty leviable on electric motors and parts thereof under the Central Excises and Salt Act, 1944 are given in Appendix VI.
- 10.3. At the public inquiry we received a complaint that because of tariff valuation, the excise duty leviable on electric motors operates unevenly on the small scale sector vis-a-vis the large scale sector and though costs may be lower for the former, the incidence of duty is apt to be heavier. We suggest that the small scale sector should approach the relevant authorities in this matter.

11.1. The following table gives the quantity and value of imports

Imports and import of electric motors during 1958, 1959 and 1960

(January-October) as recorded in the 'Monthly Statistics of Foreign Trade of India':—

		(19	58	19	59	1960 (Ja	n Oct.)
Country of ori	gin	No.	Value (Lakh Rs.)	No.	Value (Lakh (Rs.)		Value (Lakh Rs.)
1		2	\$ \\ 3 \\ \\ 3 \\ \\ \\ 3 \\ \\ \\ \\ \\	4	5	6	7
IJ. K		17,323	141·8	12,517	93.2	14,219	94·2
W. Germany .	• •	. 4,187	52.8	5,852	84.3	1,853	52·2
U.S.A	•	. 479	103.0	552	17:7	1,113	20 · 1
Others	•	. 11,361	54-5	3,082	59·1	8,759	51.3
				·····		, 	
	TOTAL	. 33,350	352-1	22,003	3 254-3	25,944	217:

The above figures are inclusive of the imports of fractional horse-power motors. The following table gives the quantity and value of imports of fractional h.p. motors during 1959 and 1960 (January-October).

	19	59	1960 (Ja	inOct.)
• •	Qty. (Nos.)	Value (Lakh Rs.)	Qty. (Nos.)	Value (Lakh Rs.)
1	2	3	4	5
A.C. Single Phase fractional horse-power motors upto quarter H.P.	3,516	3.01	6,482	5.92
A. C. Single Phase fractional horse-power motors above quarter H. P.	6,189	8.88	7,420	10.87
D. C. fractional horse-power motors	1,286	1.79	1,712	1.97
TOTAL .	10,991	13.68	15,614	18.76

The published accounts do not record the imports of electric motors by horse power, but the Commission receives monthly statements of imports of protected commodities from the Director General of Commercial Intelligence and Statistics, which include with effect from 1st January 1959 imports of electric motors by number as well as by horse power. According to him, the imports totalled 138,695 h.p. during 1959 and 131,268 h.p. during 1960 (January-October).

- 11.2. Electric motors and parts thereof fall under Serial Nos. 32(a), (b), (c), (d) and (e) of Part II of the Import Trade Control Schedule. A summary of the import control policy for the various licensing periods since October 1958—March 1959 as given in Appendix VII. It will be seen that imports of squirrel cage three phase motors are totally banned except as parts of machinery and equipment under certain conditions. Actual users' applications are considered ad hoc for import of flame proof motors conforming to BSS: 741 of 1937. The imports of other types of motors, including fractional horse power motors, are restricted. In this connection we would suggest that as there is great scope for absorption of indigenous motors with the growth of machine tool and machinery manufacturing industries, great care should be exercised to encourage use of indigenous motors and also to consider the possibilities of deleting this item wherever possible for imported plant and machinery.
- 11.3. We however received complaints from the small scale sector that large imports of fractional horse power motors have taken place through the State Trading Corporation, over and above the established importers' quota, to the detriment of the small producer. It was not possible for us to verify certain estimates, submitted in the course of

the public inquiry, of market demand and capacity of the small scale units to produce these motors. The figures given earlier show a marked increase in imports of fractional horse power motors during 1960. We recommend that Government should carefully assess the demand and production capacity of the industry in both sectors before issuing import licences for such motors.

12. Exports of electric motors in the past have been negligible. In a previous paragraph, we have laid great stress on the vital need for this industry to keep pace with technical progress already achieved in other countries with special reference to the adoption of class 'E' insulation. We are satisfied that with proper efforts on the part of the industry to adopt modern techniques and appropriate export incentives, the industry should be able to lower its costs of production and establish an export market. In this connection, the example set by other light engineering industries such as sewing machines and electric fans should be a pointer.

13.1. We selected three units for purposes of determining the costs of production of indigenous electric motors and our Cost Accounts

Officers visited these units and examined their

Commission's estimates of costs of production and fair exworks prices Officers visited these units and examined their costs. After they submitted their reports we decided not to adopt the costs of one of the three units for assessing the disadvantages suffered by the indigenous electric motor industry

vis-a-vis imported motors. Firstly, the volume of production of electric motors at that factory is rather small and secondly, its main activity is not the manufacture of electric motors but transformers. Based on the findings of actual costs of production for the year 1959-60 at the other two units we framed estimates of their costs for the next three years and later discussed them with the representatives of the two companies concerned. As the companies desired that details of their costs of production and those of our estimates should be kept confidential we are forwarding to Government the reports of our Cost Accounts Officers as confidential enclosures to this report.

13.2. In arriving at the estimates for future we have assumed that the pattern of production at the units would be broadly the same as in 1959-60. Depreciation has been provided at normal income-tax rates. We have allowed a return of 10 per cent on capital employed, the working capital element of which has been computed at an amount equivalent to four months' cost of production excluding depreciation. The following two statements give a summary of our estimates of fair ex-works prices for the future of electric motors of certain types and horse power manufactured by the two units [A and B.]

STATEMENT I

Estimates of fair exworks prices of motors manufactured by unit A

Type	1	Totally enclosed fan cooled (Squirrel cage)	sed fan co	oled (Squirr	el cage)		Screen Protected (Squirrel		Drip Proof cage)
H. P.	1	2	3	3	S	8	7.5	10	15
No. of poles	4	4	2	4	4	4	4	4	4
	2	3	4	5-6	9	7	8	6	10
1. Raw materials .	109-53	140-15	134:85	182-57	230-65	1736-53	289-79	311.07	443·69
2. Conversion charges .	18.90	19.41	19-41	36.29	26.66	158-27	26.18	30.24	54.02
3. Painting and packing cost	7.65	7-65	7.65	8.79	8.79	81.00	12.57	12.57	18-11
4. Royalty	6.14	7.10	8.69	8.27	10.48	98.62	12.91	15-87	20.72
5. Depreciation	2.63	2.69	2.69	5.04	3.70	95.93	3.64	4.20	8.56
6. Return	7.94	90.6	8.94	13.78	13.90	194.44	16.38	18.01	28 · 10
7. Fair ex-works price* .	. 152-79	186-06	182.23	254 . 74	294-18	2364 · 79	361-47	391.96	573 - 20
Say (Rs.)	. 153	186	182	255	294	2365	361	392	573

*Excluding excise duty.

lype	v	creen Prote	Screen Protected Drip Proof (Squirrel cage)	roof (Squir	rel cage)	Screen protected (Slip ring)	otected g)	Totally Enclosed (Slip ring)	Hollow	Hollow Spindle	Loom Motor
H.P.		20	20	30	S0 ·	20	100	20	8	30	-
No. of poles	!	4	9	4	4	4	4	9	4	4	9
1	=	11	12	13	14	15	16	17	18	61	20
1. Raw materials		643 · 81	719-56	665.44	927-29	1186.05 2151.32 2208.51	2151-32	2208.51	321-36	321-36 1026-34	174-37
2. Conversion charges		70.54	77.88	75-29	120.42	179.06	405-96	179.06 405.96 200.76	121.55	121.55 178.25	31.52
3. Painting and packing cost		46.13	46.13	46-13	69-33	69-33	81.00	81.00	15.18	47-41	7.65
4. Royalty	•	27.82	32.52	33.09	50.75	71.76	127-21	166.74	18.32	56.99	9.31
5. Depreciation	•	11.18	12.33	11.93	19.08	28.37	246-84	122.06	19.26	108.38	4.38
6. Return	•	39.83	44.42	42.20	62.54	83 · 30	404 · 18	248-69	36.80	183-19	12 · 70
7. Fair ex-works price*	•	839-31	932-84	874-08	1249-41	1617-87	3416-51	1617-87 3416-51 3027-76	532.47	532-47 1600-56	239.93
Say (Rs.)	•	839	933	874	1249	1618	3417	3028	532	1601	240

STATEMENT II

Estimates of fair ex-works prices of motors manufactured by unit B

Type	Frac	tional H.P	. motors. S citor Start	Fractional H.P. motors. Split phase Capacitor Start	Capa-	Totall	y Enclose	Totally Enclosed Fan Cooled (Squirrel cage)	ooled (Sq	uirrel cag	(eg
H.P.		0.25	0.50	0.25	0.50	2	3	S	7.5	01	15
No. of poles		4	4	4	4	4	4	4	4	4	4
1		2	3	4	5	9	7	8	6	20	==
1. Raw materials	•	63.35	77-17	73.55	89.88	164-61	212.90	264.60	366.64	500.40	763 - 53
2. Conversion charges		28.42	29.47	28.42	29.47	50.23	69.26	78.62	71.45	86.73	153.50
3. Packing materials		1.99	1.99	1.99	1.99	7.80	9.22	10.53	12.93	19.64	54.05
4. Royalty	•	*	:	:	:	16.69	19.24	24.98	31.97	39-33	54.95
5. Depreciation		1.08	1.12	1.08	1.12	5.07	66.9	7.94	7.21	9.76	15.50
6. Return		06.9	7.53	7.24	7.92	11-43	15·10	18.01	21.00	27-49	44.73
7. Fair ex-works price *	1	101 - 74	117.28	112.28	129.18	255-83	332-71	404-68	511.20	682*35 1086 26	1086-26
Say (Rs.)		102	1117	112	129	256	333	405	511	682	1086

*Excluding excise duty,

motor)	
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Type	•		**	Screen	Screen protected (Squirrel cage)	uirrel cage)			
H.P.	-	:	7	3	3	5	s	7.5	7.5
No. of poles	4		4	2	4	4	9	2	4
1			13	14	15	. 91	17	18	19
1. Raw materials	. 118	118.89	124-22	140.26	191 - 73	217-98	323·34	293.02	304-63
2. Conversion charges .	. 38	38.07	45.86	50.55	11.19	62.40	61 · 16	98.68	22.99
3. Packing materials		7.91	10.53	10-53	8.12	8.59	9-45	9.84	9.84
4. Royalty	. 12	12.21	14.39	17-24	16.50	21.20	26-42	27.68	25.86
5. Depreciation		3.84	4.63	5.10	6.24	6.30	6.17	6.07	6.74
6. Return		90-8	9.62	10.76	13-51	14.62	18-20	20.17	18-15
7. Fair ex-works price*	. 188	188-98	209-28	.234.44	297-87	331.09	444 · 74	449.64	431-99
Say (Rs.)	. 189		209	234	298	331	445	450	432
*Excluding excise duty								,	

*Excluding excise duty.

STATEMENT II-contd.

Type		Screen prote	Screen protected (Squirrel cage)	cage)		Loom	Loom motors
H.P.	10	10	15	15	50	-	1
No. of poles	4	9	4	. 9	4	∞	9
	20	21	Z	23	24	25	26
1. Raw materials	374-17	423-11	450-30	717-50	631-14	182.45	182.45
2. Conversion charges	70.82	70-82	73-64	132.28	159.74	75.50	79.88
3. Packing materials	12.06	12.29	12.29	54.05	54.05	13.13	13.13
4. Royalty	31.60	38.78	41.33	49.21	56.83	25.53	20.17
5. Depreciation	. 7.15	7.15	7.43	13.36	16.13	7.62	8.06
6. Return	. 21.15	23.03	24.30	40.81	41.02	15.07	15.33
7 Fair ex-works price*	\$16.95	575-18	609-29	1007.21	958-91	319.30	319.02
Say (Rs.)	517	\$75	609	1007	656	319	319

*Excluding excise duty.

14.1. We called for information from the Collectors of Customs and some of the importers regarding c.i.f. prices and landed costs of

Comparison of the estimated fair ex-works prices of indigenous electric motors with the landed costs without duty of imported motors

recently imported electric motors. Due to restrictions on imports of electric motors relevant information could not be obtained. The Collector of Customs, Bombay however furnished us with certain information relating to motors imported through his port in 1960, but this was

mostly related either to special types of motors not being manufactured in the country or to motors with special accessories or to those horse power motors for which we did not estimate the future costs of production. We, therefore, requested importers and manufacturers with foreign collaboration to send us f.o.b./c.i.f. quotations of motors of their principals abroad. Here again, except in the case of one importer, namely, Balmer Lawrie and Co. Ltd., the information furnished related to motors mainly with class 'E' insulation which are at present not manufactured in the country. We have, therefore, adopted for purposes of comparison with our estimated fair ex-works prices of indigenous motors the c.i.f. quotations received through Balmer Lawrie & Co. Ltd., for motors with class 'A' insulation. Although the above c.i.f. quotations were not available for all the types and ratings for which we have estimated the fair ex-works prices, the information covered a fairly large number of items.

14.2. The following statement gives a comparison of the fair exworks prices of indigenous electric motors of certain types and ratings with landed costs without duty of similar types and ratings of imported motors.

सम्बद्धां नवने

Statement showing comparison of the estimated fair ex-works prices of indigenous motors with the landed cost (without duty) of imported motors

(In Rs. per motor)

Types		Screen pr	Screen protected (Squirrel cage)	equirrel c	age)		Screen p	rotected	Screen protected Drip Proof (Squirrel cage)	(Squirrel	cage)
H.P.	m	5	7.5	10	15	8	7.5	10	15	20	90
Poles	4	4	4	4	4	4	4	4	4	4	4
1	2	3	4	5	9	7	8	6	10	11	12
1. C. i.f. price	250	294	390	472	605	089	400	484	620	969	1680
2. Customs duty * (15 per cent)	38	4	8	16	91	102	09	73	93	104	252
3. Clearing charges (1%)	3	ю	41	5	9		4	5	9	7	17
4. Landed cost with duty (1+2+3)	291	341	453	548	702	789	464	562	719	908	1949
5. Landed cost without duty .	253	297	394	477	611	289	404	489	979	702	1697
6. Estimated fair ex-works price †	298	331	432	517	609	959	361	392	573	839	1249
7. Difference between 6 & 5	45	34	38	40	7	272	()43	L ()	()53	137	()448
8. Difference (7) as % of c. i. f. (1)	18.0	11.6	7.6	8.5	(—)0.3	40.0	()10-8 ()20-0	-)20.0	(-)8.5	19.7	()26·7

*Excluding the countervailing import duty equivalent to the excise duty. †Excluding the excise duty.

(In Rupees per motor)

Types	Total	ly enclosed f	an cooled (S	Totally enclosed fan cooled (Squirrel cage)		Totally enclosed (Slip ring)	Fractional Motors Split phase	Motors	Fractional tors Capa start	Fractional Motors Capacitor start
H.P.	8	5	7.5	10	15	50	0.25	0.50	0.25	0.50
Poles	4	4	4	4	4	9	4	4	4	4
1	13	14	15	16	17	18	19	70	21	22
1. C. i. f. price	253	330	453	580	755	0009	• 93	112	108	128
2. Customs duty* (15 per cent)	38	-50	-89	87	113	006	14	17	16	19
3. Clearing charges (1%)	m	154		9	∞	09	1		-	****
4. Landed cost with duty (1+2+3)	294	383	929	.673	876	0969	108	130	125	148
5. Landed cost without duty .	256	333	458	586	763	0909	94	113	100	129
6. Estimated fair ex-works price †	255	291 40 5	511	682	1086	3028	102	117	112	129
7. Difference between 6 & 5	(—) 77	(-)39	53	96	323	()3032	∞	4	m	:
8. Difference (7) as % of c.i.f.(1)	(—)0·4 30·4	$(-)^{11\cdot 80}_{21\cdot 8}$	11.7	16.55	42.8	()20.5	9.8	3.6	2.8	:

*Excluding the countervailing import duty equivalent to the excise duty. †Excluding the excise duty.

15.1. The above comparison of our estimated fair ex-works prices of indigenous motors with the landed costs without duty of correspond-

Continuance of protect on ing imported motors indicates that (i) in the case of motors of squirrel cage drip proof types the fair ex-works prices are lower than the landed costs without duty and only in one case there is

disadvantage of 19.7 per cent; (ii) in the case of motors of totally enclosed fan cooled types the disadvantage of the domestic industry ranges from 11.7 per cent to 42.8 per cent; (iii) in the case of motors of squirrel cage screen protected types the disadvantage ranges from 8.5 per cent to 40 per cent and (iv) in the case of fractional h.p. motors the disadvantage ranges from 2.8 per cent to 8.6 per cent. This may perhaps lead to the conclusion that the disadvantage suffered by the electric motor industry vis-a-vis imported motors is, except in a few cases, only nominal and as such it may not need continuance of tariff protection. As stated by us earlier in paragraphs 6.4 and 6.6 the industry recently emerged from a slack period in 1959 and early 1960 when the demand and consequently the production had fallen. It is just now embarking on large scale expansion and diversification and is attempting to take up the manufacture of motors of progressively higher ratings and special types which were not manufactured in the past. Such an enterprise needs every encouragement and the continuance of a sense of security at present enjoyed by the industry under protection is necessary for the purpose. While the comparison with c.i.f. prices has been attempted only in the case of low horse power motors for which we have estimated fair ex-works prices, it is not improbable that the domestic industry will be at a greater disadvantage in the case of higher horse power motors. We are of the view that protection should be continued for a further term to enable the industry to consolidate its present position and to successfully carry out its plans for the future. A review of this industry can be undertaken by us in 1963 along with that of the power and distribution transformer industry, protection granted to which would expire on 31st December 1963. We, therefore, recommend that protection to the electric motor industry should be continued for a further period of two years ending 31st December 1963 and that the scheme of protection should cover (i) squirrel cage and slip ring motors of 1 to 500 h.p. excluding variable speed commutator motors, (ii) single phase motors of 1 to 3 h.p., (iii) fractional h.p. motors and (iv) component parts of the above mentioned motors.

15.2. As regards the rate of protective duty, the existing rate of duty on squirrel cage induction motors of $\frac{1}{4}$ to 100 h.p. and slip ring motors of 1 to 100 h.p. [I.C.T. Item 72(14)(a)] is 15 per cent ad valorem. The revenue duty on non-protected categories of motors [I.C.T. Item No. 72] has already been raised from 10 per cent ad valorem to 15 per cent ad valorem by the Finance Bill, 1961. We recommend that the same rate of duty, namely, 15 per cent ad valorem, should be made applicable to squirrel cage and slip ring motors of 1 to 500 h.p., single phase motors of 1 to 3 h.p. and fractional h.p. motors of not

less than ½ h.p. As regards the component parts of the above motors we recommend that the existing duty of 20 per cent ad valorem should be continued. Fractional h.p. motors less than ½ h.p. are at present assessed to a revenue duty of 35 per cent ad valorem under I.C.T. Item 72(6). These sizes of fractional horse power motors are mostly manufactured by the units in the small scale sector for which we have not estimated the fair ex-works prices. Further, the small scale sector, with its low level of production and other drawbacks as compared to the large-scale sector should need a higher rate of protective duty than that enjoyed by the latter. We, therefore, recommend that the existing revenue duty of 35 per cent ad valorem on fractional h.p. motors of less than ¼ h.p. and on component parts of such motors should be converted into an equivalent protective duty.

16. If our recommendations in paragraph 15 are accepted, Item

Modifications to the Indian Customs Tariff Act, 1934 should be amended as indicated below:—

Item No.	Name of article	Nature of duty	Stan- dard rate of	of du	the p	rate te arti- roduce ture of	Duration of pro- tective rates of duty
			duty	The U. K.	A Britisl Color		
1	2	3	4	5	6	7	8
72(14)	 (a) The following electric motors, namely:— (i) Squirrel cage induction motors and slip ring motors of a brake-horse-power not exceeding 500 but not less than one brake-horse-power, excluding variable speed commutator motors. 	Protective .	15 per cent ad valorem		••	Free	December 31st, 1963.
	(ii) Single phase motors of a brake-horse-power not exceeding 3 but not less than one brake- horse-power.	Protective	15 per cent ad valorem	••	••	Free	December 31st, 1963.
	(iii) Fractional h.p. motors of not less than one-quarter of one brake-horse-power.	Protec- tive	15 per cent ad valorem		••	Free	December 31st, 1963.
	(iv) Fractional h.p. motors of less than one- quarter of one brake- horse-power.	Protec- tive	35 per cent ad valorem	• • :	• •	10 per cent ad valo- rem	December 31st, 1963.

1 2 3 4 5 6 7 8

(b) Component parts of electric motors as defined in sub-items (i), (ii) and (iii) of Item 72(14)(a), but excluding control gear for the same, provided that only such articles shall be deemed to be component parts as are essential for the working of the electric motors and have been given for that purpose some special shape or quality which would not be essential for their use for any other purpose.

Protective 20 per .. . tive cent ad valorem

December 31st, 1963.

(c) Component parts of P electric motors as defined in sub-item (iv) of Item 72(14) (a).

Protec- 35 per tive cent ad valorem 10 December per 31st, 1963. cent ad valorem

- 17.1. We received no complaints about selling arrangements. Delivery periods of motors upto medium size were regarded as reasonable. As regards motors of higher horse power, the delivery periods quoted continue to be impractically long for causes already noted in paragraph 4. We recommend that Government should take steps to enable the industry to shorten its delivery periods by allowing imports of necessary raw materials or otherwise.
- 17.2. There was considerable discussion on the selling prices of the large scale sector at the public inquiry. From the facts before us, the net selling prices of several producers appear to be unduly high. We have impressed on the producers the need to make a concerted effort to bring down their selling prices in fair relation to their costs particularly in view of the vital significance of electric motors to industrial development.
- 18. Our conclusions and recommendations are summarised as Summary of conclusions and recommendations
 - (i) The current domestic demand for electric motors is placed at one million h.p.

[Paragraph 7.2.]

(ii) The demand for electric motors in 1964 is estimated at 2.6 million h.p. If the Third Five Year Plan target for installed capacity of power is raised to more than 11.8 million K.W., the requirements of motors will be correspondingly higher.

[Paragraph 7.4.]

(iii) Government should give all possible assistance to the electric motor industry to work double shift especially by ensuring adequate supply of raw materials.

[Paragraph 7.5.]

(iv) Steps to establish additional capacity for the manufacture of stampings should be expedited.

[Paragraph. 8.2.3.]

(v) Government should encourage the manufacturers of electric motors to use aluminium cast rotors and for this purpose assist the industry to procure the necessary equipment for an early switch-over.

[Paragraph 8.4.]

(vi) Manufacturers of electric motors should expedite measures to change over to class 'E' insulation without further delay.

[Paragraph 8.9.]

(vii) The Development Commissioner for Small Scale Industries, in consultation with the Directors of Industries in the States, should take necessary steps to improve the present arrangements of distributing raw materials to the small scale units in the electric motor industry.

[Paragraph 8.10.]

(viii) Government should carefully assess the demand for fractional h.p. motors and production capacity of the electric motor industry in both sectors for manufacture of such motors before issuing import licences.

[Paragraph 11.3.]

(ix) Protection to the electric motor industry should be continued for a further period of two years ending 31st December, 1963. Protection should cover (i) squirrel cage and slip ring motors of 1 to 500 h.p., excluding variable speed commutator motors, (ii) single phase motors of 1 to 3 h.p., (iii) fractional h.p. motors and (iv) component parts of the above mentioned motors.

[Paragraph 15.1.]

(x) The protective duty applicable to squirrel cage and slip ring motors of 1 to 500 h.p., single phase motors of 1 to 3 h.p. and fractional h.p. motors of not less than ½ h.p. should be 15 per cent ad valorem. The existing duty of 20 per cent ad valorem on component parts of the above motors should be continued. The existing revenue duty of 35 per cent ad valorem on fractional h.p. motors of less than ½ h.p. and component parts of such motors should be converted into an equivalent protective duty.

[Paragraph 15.2.]

(xi) If the recommendations to continue protection to the electric motor industry are accepted, Item 72(14) of the First Schedule to the Indian Tariff Act, 1934 should be amended as indicated in paragraph 16.

[Paragraph 16.]

(xii) Government should take steps to enable the electric motor industry to shorten its delivery periods by allowing imports of necessary raw materials or otherwise.

[Paragraph 17.1.]

19. We wish to convey our thanks to the manufacturers, importers, consumers and the Associations who furnished us with detailed information in connection with this inquiry and to their representatives who gave evidence before us at the public inquiry.

K. R. P. AIYANGAR,

Chairman.

RAMA VARMA, Secretary.

BOMBAY:

Dated 24th April, 1961.



S. K. MURANJAN, *Member*.

J. N. DUTTA,

Member.

APPENDIX I

(Vide Paragraph 3.1)

List of Firms/Associations/Government Departments to whom questionnaires/letters were issued and from whom replies or memoranda were received

*Indicates those who have replied.

† Indicates those who have stated that they are not interested.

PRODUCERS

- 1. Argus Engineering Co. Ltd., Peelamedu Post, Coimbatore.
- *2. Associated Electrical Industries Manufacturing Co. Private Ltd., Crown House, 6, Mission Row, Calcutta-1.
- *3. Bharat Bijlee Ltd., Udyog Nagar, Bombay-22.
- *4. British India Electric Construction Co. Ltd., 6, Mayurbhanj Road, Calcutta-23.
- *5. Crompton Parkinson (Works) Private Ltd., Haines Road, Worli, Bombay18.
- *6. Eastern Electrical Co. Ltd., Singanallur P.O., Coimbatore District.
- *7. Electric Construction & Equipment Co. Ltd., 9, Kaliprasanna Singhee Road, Calcutta-2.
- *8. The General Electric Company of India (Manufacturing) Private Ltd, 58, Taratalla Road, Garden Reach, Calcutta-24.
- *9. The Hindustan Electric Co. Ltd., Industrial Area, Faridabad (East Punjab).
- *10. Jyoti Ltd., Baroda-3.
- *11. Kirloskar Electric Co. Ltd., Post Box No. 1017, Bangalore-3.
- 12. National Electrical Industries Ltd., Industrial Estate, Lalbaug, Bombay-12.
- *13. P. S. G. & Sons' Charity Industrial Institute, Peelamedu Post, Coimbatore.
 - 14. Motor & Machinery Manufacturers Ltd., 31, Chittaranjan Avenue, Calcutta12.
- *15. Orient General Industries Ltd., 8, Royal Exchange Place, Calcutta-1.
- *16. P. Govindaraj & Sons (Private) Ltd., 330, Thambu Chetty Street, Madras1.
- 17. Coimbatore Premier Corporation Private Ltd., Post Box No. 210, 34, Avanashi Road, Coimbatore-1.
- *18. Sri Ramakrishna Mission Vidyalaya Industrial Section, Sri Ramkrishna Vidyalaya P.O., Perianaickenpalayam, R.S., Coimbatore District.
- 19. Sri Jayachandar Engineering Works, 9/431, Mettupalayam, R. S. Puram, Coimbatore.
- The India Electric Works Ltd., Diamond Harbour Road, Behala, Calcutta-34.
- *21. Ogale Glass Works Ltd., Ogalevadi, District North Satara.
- *22. Alpha Electrical and Engineering Co., 30, Calicut Street, Fort, Bombay-
 - 23. British India Engineering Co., Agra Road, Bhandup, Bombay-78.

- *24. Spartan Electricals, Cadell Road, Bombay.
- Commercial Broadcasting, National Insurance Building, Bastion Road, Bombay-1.
- * 26. Hind Electrics, Opp. Mazgaon P.O., Bombay-10.
 - N. G. K. Electrical Industries, Devidayal Compound, Reay Road, Bombay-10.
 - *28. Prabhat Electric Equipment Corporation, Jogeshwari Estate, Jogeshwari, Bombay-60.
 - 29. Electromeck, 75, Worli, Bombay-18.
 - *30. Sri Lakshmi Foundry, Patel Road, Coimbatore-9.
 - *31. Subbiah Foundry, Avanashi Road, Pappanaickenpalayam, Coimbatore-1.
- *32. Nava Mani & Co., 2/246-48, Pappanaickenpalayam, Coimbatore-1.
- *33. Karthikeya Foundry, Post Box No. 207, Pappanaickenpalayam, Puliakulam Road, Coimbatore-1.
- *34. Texmo Industries, Mettupalayam Road, R. S. Puram Post, Coimbatore-2.
- *35. Nahan Foundry (Private) Ltd., Nahan, Himachal Pradesh.
- *36. The Jay Engineering Works Ltd., 183-A, Prince Anwar Shah Road, Calcutta-31.
- *37. India Supplies Engineering Works Ltd., Bihari Niwas, Kanpur.
- *38. New India Electric Corporation, 37-F, Parel Road Cross Lane, Chinchpokli, Bombay-12.

PRODUCER'S ASSOCIATIONS

- *1. Indian Electrical Manufacturers' Association, India Exchange, Calcutta1.
- *2. The Small-Scale Electric Motor Manufacturers' Association, C/o Batliboi & Co., Forbes Street, Bombay-1.

IMPORTERS

- *1. Associated Electrical Industries (India) Private Ltd., Crown House, 6, Mission Row, Calcutta-1.
- *2. Balmer Lawrie and Co. (India) Ltd., 21, Netaji Subhas Road, Calcutta-1.
- 3. Batliboi and Co., Forbes Street, Bombay-1.
- Chemicals and Machinery Private Ltd., Hamam House, Hamam Street, Bombay-1.
- *5. The Crompton Engineering Co. (Madras) Private Ltd., P.O. Box 205, Second Line Beach, Madras-1.
- *6. The English Electric Co. Ltd., D-3, Gillander House, 8, Netaji Subhas Road, Calcutta-1.
- *7. The General Electric Co. of India Private Ltd., Magnet House, Chittaranjan Avenue, Calcutta-13.
- *8. Mather and Platt Ltd., Hamilton House, 8, Graham Road, Ballard Estate, Bombay-1.
- *9. Refrigerators (India) Private Ltd., 59-C, Park Street, Calcutta.
- †10. Singer Sewing Machine Co., 207, Hornby Road, Bombay-1.
- †11. Greaves Cotton & Crompton Parkinson Private Ltd., 1, Forbes Street, Bombay1.

- *12. Siemens Engineering & Manufacturing Co. of India Private Ltd., Stadium House, Vir Nariman Road, Bombay-1.
- *13. Voltas Ltd., 19, Graham Road, Ballard Estate, Bombay-1.
 - 14. Dodsal Private Ltd., Mafatlal House, Backbay Reclamation, Bombay-1.
- †15. Air Conditioning Corporation Private Ltd., Construction House, Wittet Road, Ballard Estate, Bombay-1.

CONSUMERS

- Ahmedabad Millowners' Association, Navrangpura, Post Box No. 7, Ahmedabad.
- 2. Laxmiratan Cotton Mills Co. Ltd., Bihari Niwas, Kanpur.
- *3. Power Tools & Appliances Co., 2, Dalhousie Square East, Calcutta-1.
- 4. Walchandnagar Industries Ltd., P.O. Walchandnagar, Poona District.
- *5. The Millowners' Association, Elphinstone Building, Vir Nasiman Road-Bombay-1.
- *6. Cooper Engineering Ltd., Satara Road, Distt. Satara.
 - 7. Jyoti Ltd., Post Chemical Industries, Baroda-3.
- 8. Jhonston Pumps (India) Ltd., 2, Fairlie Place, Calcutta-1.
- *9. Hindustan Aircraft Private Ltd., Bangalore.
- *10. Controller of Stores, Northern Railway, Baroda House, New Delhi-1.
- *11. Controller of Stores, Southern Railway, Madras.
- 12. Controller of Stores, Western Railway, Churchgate, Bombay.
- *13. Chittaranjan Locomotive Works, Chittaranjan.
- *14. National Machinery Manufacturers Ltd., Kalwe, Thana.
 - 15. Central India Machinery Manufacturing Co. Ltd., P.O. Birlanagar, Gwalior.
- *16. Tata Engineering & Locomotive Co. Ltd., Bombay House, Bruce Street, Bombay-1.
 - 17. Mahindra & Mahindra Ltd., Gateway Building, Apollo Bunder, Bombay-1.
- Jay Engineering Works Ltd., 183-A, Prince Anwar Shah Road, Dhakuria, Calcutta-31.
- *19. Associated Cement Companies Ltd., 121, Queen's Road, Bombay-1.
- *20. Hindustan Machine Tools Ltd., Jalahalli, P.O., Bangalore.
- *21. Phaltan Sugar Works Ltd., Sakharwadi, Distt. North Satara.
- 22. Godavari Şugar Mills Ltd., Lakshmiwadi, Distt. Ahmednagar.
- †23. Voltas Ltd., 19, Graham Road, Ballard Estate, Bombay-1.

PROSPECTIVE PRODUCERS

- *1. Heavy Electricals Ltd., Govindpura, Post Box No. 46, Bhopal.
 - 2. C. Sundaram, 5-37, Gopalpuram, Coimbatore.
 - 3. Balasubramania Foundry, Patel Road, Coimbatore.
- 4. Vasant Engineering Ltd., Pratapnagar, Baroda.
- 5. Ramakrishna Metal & Alloy Industries, Sardar Patel Road, Coimbatore.
- 6. Vijaya Foundry, Pappanaickenpalayam, Coimbatore.
- Engineering Works of India (Private) Ltd., 20, Ultadanga Road, Calcutta-4.

- *8. Government Electric Factory, Post Box No. 579, Mysore Road, Bangalore-2.
- Best & Company Private Ltd., 13/15, North Beach Road, Post Box No. 63, Madras-1.
- 10. Calcutta Fan Works Private Ltd., 19-B, Chowringhee Road, Calcutta-13.
- 11. Kasturi Engineers Ltd., 8/4, Avanashi Road, Coimbatore.
- 12. Jaura Engineering Works Private Ltd., 24, Industrial Area, Chandigarh.
- 13. Broadway Engineering Transport Co., 5/5, Old Post Office Road, Coimbatore.
- 14. Sri Krishna Foundry, Pappanaickenpalayam, Coimbatore-1.
- Engineering Products Private Ltd., Ghodbunder Road, Jogeshwari, Bombay-60.
- *16. Bharat Techno-Mechanical Industries (Private) Ltd., Maneklal Road, Navsari, Dist. Surat.
 - Modern Engineering Moulding Co., Near Kalyan Mills, Narode Road, Ahmedabad.
 - Hindkamal Electric Motors Ltd., 606/4, Opp. Ramnath Mahadeo, Raipura, Ahmedabad.
 - 19. Govardhan Engineering Industries, Ukkadam, South Coimbatore.
 - National Electric Appliances Co., 43, Biren Rai Road, East Behala, Calcutta-34.
- *21. Ganesh Flour Mills Co. Ltd., Post Box No. 1025, Subzi Mandi, Delhi-6.
 - 22. Beegee Corporation (Private) Ltd., The Mall, Patiala.
- *23. Matchwel Electricals (India) Ltd., Off Nagar Road, P.O. Yeravda, Poona-6.
 - 24. General Engineering Co., Patel Road, Coimbatore.
- *25. Kumar Industries, Edathara Post, Palghat, Kerala State.
- 26. Khalsa Foundry and Workshop C. I. S. Ltd., Sultanpur Lodhi, Punjab.
- 27. Thaker Engineering Corporation, Fort Road, Cannanore, Kerala.

GOVERNMENT DEPARTMENTS

- *1. The Senior Industrial Adviser, Development Wing, Udyog Bhavan, Maulana Azad Road, New Delhi.
- *2. The Development Commissioner, Small-Scale Industries, Udyog Bhavan, Maulana Azad Road, New Delhi.
- *3. The Director of Co-ordination & Statistics, Directorate General of Supplies & Disposals, National Insurance Building, Parliament Street, New Delhi-1.
- *4. The Director, Indian Standards Institution, Manak Bhavan, 9, Mathura Road, New Delhi.
- *5. The Director, Government Test House, 11/1, Judge's Court Road, Alipore, Calcutta-27.
- *6. The Director, National Physical Laboratory, Hillside Road, New Delhi-12.
- *7. The Director, Central Mining Research Station, Post Box No. 50, Dhanbad, Bihar.
- *8. The Iron & Steel Controller, 33, Netaji Subhas Road, Calcutta-1.
- *9. The Collector of Customs, Bombay,
- *10. The Collector of Customs, Calcutta.
- *11. The Collector of Customs, Madras.
- *12. The Collector of Customs, Cochin.

- *13. The Director, Central Water and Power Commission, Bikaner House, Shah-jahan Road, New Delhi.
- *14. Counsellor (Commercial) to the High Commission of India in the U.K., India House, Aldwych, London.
 - 15. First Secretary (Commercial) to the Embassy of India, 262, Koblenzorstrasse, Bonn, W. Germany.
 - 16. Director of Industries, Government of Madras, Fort St. George, Madras.
- *17. Director of Industries, Directorate of Industries (Statistical Cell), Government of West Bengal, 11A, Hastings Street, Calcutta-1.
- *18. Director of Industries, Government of Maharashtra, Sachivalaya Annexe Bombay-32.
 - 19. Director of Industries, Government of Gujarat, Ahmedabad.
- *20. Director of Industries, Government of Mysore, Vidhan Soudh, Bangalore.
- *21. Director of Industries, Government of East Punjab, Chandigarh.
- *22. The Chief Secretary to the Government of Andhra Pradesh, Hyderabad.
- †23. The Chief Secretary to the Government of Assam, Shillong.
 - 24. The Chief Secretary to the Government of Bihar, Patna.
 - 25. The Chief Secretary to the Government of West Bengal, Calcutta.
 - 26. The Chief Secretary to the Government of Gujarat, Ahmedabad.
 - 27. The Chief Secretary to the Government of Jammu and Kashmir, Srinagar.
- 28. The Chief Secretary to the Government of Kerala, Trivandrum.
- †29. The Chief Secretary to the Government of Madhya Pradesh, Bhopal.
- 30. The Chief Secretary to the Government of Madras, Madras.
- †31. The Chief Secretary to the Government of Maharashtra, Bombay.
- *32. The Chief Secretary to the Government of Mysore, Bangalore.
- †33. The Chief Secretary to the Government of Orissa, Bhubaneshwar.
 - 34. The Chief Secretary to the Government of East Punjab, Chandigarh.
- 35. The Chief Secretary to the Government of Rajasthan, Jaipur.
- *36. The Chief Secretary to the Government of Uttar Pradesh, Lucknow.
- †37. The Chief Commissioner, Delhi Administration, Delhi.
 - 38. The Chief Commissioner, Himachal Pradesh, Simla.

RAW MATERIAL SUPPLIERS

- *1. Dr. Beck & Co. (India) Private Ltd., Gateway Building, Apollo Bunder, Bombay-1.
- *2. Devidayal Stainless Steel Industries Private Ltd., Darukhana, Reay Road, Bombay-10.
- *3. The Tata Iron & Steel Co. Ltd., Bombay House, Bruce Street, Bombay-1.
- *4. Sankey Electrical Stampings Private Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay-1.
- *5. The Indian Cable Co. Ltd., 9, Hare Street, Calcutta-1.
- *6. Devidayal Cable Industries Private Ltd., Darukhana, Reay Road, Bombay-10.
 - 7. Electrical Industries Corporation, 33, Brabourne Road, Calcutta-1.
 - 8. National Insulated Cable Co. of India Ltd., 4, Dalhousie Square East, Calcutta-1.
- *9. Sri Shakti Trading Company, Bansilal Motilal Mansion, 22, Apollo Street, Bombay-1.

- Hindustan Transmission Products Private Ltd., Chandivali, Kurla Vihar Roads-Greater Bombay-70.
 - 11. Hindustan Wire Products Private Ltd., Patiala, East Punjab.
- *12. Orient Steel & Wire Industries Private Ltd., New Industrial Township, Faridabad.
- 13. Commercial Bureau, Bombay Mutual Building, Bombay-1.
- *14. Beni Engineering Works, Ltd., 1, Crooked Lane, Calcutta-1.
- *15. British India Electric Construction Co. Ltd., 6, Mayurbhanj Road, Calcutta-23.
- *16. The Crompton Engineering Co. (Madras) Private Ltd., Second Line Beach, Post Box No. 205, Madras-1.
- *17. Greaves Cotton & Crompton Parkinson Private Ltd., 1, Forbes Street, Post Box No. 91, Bombay-1.
 - 18. Jay Engineering Works Ltd., 183-A, Prince Anwar Shah Road, Calcutta-31.
- *19. National Engineering Industries Ltd., (Bearing Division), Jaipur.



(Vide Paragraph 3.2)

List of electric motor manufacturing and other factories visited by the Commission and its Officers

					_			:	
Date of visit	4	16th January, 1961.	22nd February, 1961. 23rd January, 1961.	22nd February, 1961.	25th January, 1961. January/February, 1961.	23rd January, 1961. January/February, 1961.	25th February, 1961.	29th December, 1960. 7th January, 1961.	29th December, 1960. 5th January, 1961.
Names of Members of the Commission and Officers who visited the factory	8	1 Best and Co. Pvt. Ltd., Mad- Chairman and Dr. S. K. Muranjan and Shri J. N. Dutta, Members ras.	Chairman and Dr. S. K. Muranjan and Shri J. N. Dutta, Members Shri B. R. Sehgal, Secretary and Shri Hari Bhushan, Technical Director (Engineering & Metallurgy).	Chairman and Dr. S. K. Muranjan and Shri JN. Dutta, Members	Shri Hari Bhushan, Technical Director (Engineering & Metallurgy) Shri A. K. Banerjee, Assistant Cost Accounts Officer	Shri B. R. Sehgal, Secretary and Shri Hari Bhushan, Technical 23rd January, 1961. Director (Engineering & Metallurgy). Shri S. R. Mallya, Assistant Cost Accounts Officer January/February, 19	Chairman, Shri J. N. Dutta, Member and Shri Hari Bhushan, Technical Director (Engineering & Metallurgy).	Shri J. N. Dutta, Member Shri Hari Bhushan, Technical Director (Engineering & Metallurgy)	Shri J. N. Dutta, Member . Shri Hari Bhushan, Technical Director (Engineering & Metallurgy)
Name of the factory	2	Best and Co. Pvt. Ltd., Madras.	2 Bharat Bijjec Ltd., Bombay .	Crompton Parkinson (Works)	rvi. Lid., bombay.	National Electrical Industries Ltd., Bombay.	Alpha Electric and Engi-) neering Co. Ltd., Bombay. Spartan Electricals, Bombay.	Motor and Machinery Manufacturers Ltd., Calcutta.	Associated Electrical Industries Manufacturing Co. Pvt. Ltd., Calcutta.
Z.S.	1	-	7	en'		4	י איז יעס	7	. ∞

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	2	e	4
6	Electric Construction and Equipment Co. Ltd., Calculta.	Shri Hari Bhushan, Technical Director (Engineering & Metallurgy) . 4th January, 1961	4th January, 1961.
	10 British India Electric Construction Co. Ltd., Calcutta.	Ditto	5th January, 1961.
	The General Electric Co. of India (Mfg.) Pvt. Ltd., Calcutta.		
12	Orient General Industries Ltd., Calcutta.	Ditto	6th January, 1961.
13	The India Electric Works Ltd., Calcutta.	ui-	
14	Kirloskar Electric Co. Ltd., Bangalore.	Shri U. R. Padmanabhan, Cost Accounts Officer	. January/February, 1961.
	15 Indian Cable Co. Ltd., Jamshedpur.	Shri Hari Bhushan, Technical Director (Engineering & Metallurgy)	12th January, 1961.
	16 Tata Iron & Steel Co. Ltd., Jamshedpur.	Ditto.	13th January, 1961.
17	Sankey Electrical Stampings Pvt. Ltd., Bombay.	Ditto.	25th January, 1961.

APPENDIX III

(Vide Paragraph 3.3)

List of persons who attended the public inquiry on 28th February 1961

PRODUCERS Crompton Parkinson (Works) 1. Shri V. V. Dhume Representing Private Ltd., Haines Road. 2. M. J. Desai 3. S. G. Padhye Worli, Bombay-18. A. K. Bose Bharat Bijlee Ltd., Udyog-5. J. S. Zaveri J. R. Danani nagar, Bombay-22. Kirloskar Electric Co. Ltd., " N. W. Gurjar . 7. Post Box No. 1017, Bangalore-3; and Indian Electrical Manufacturers' Association, India Exchange (7th Floor), Calcutta-1. Kirloskar Electric Co. Ltd., R. L. Kirloskar 8. Post Box No. 1017, Ban-P. R. Mundewadi 9. galore-3. 10. A. D. Alawani P. N. Dandekar The General Electric Co. of 12. Mr. J. E. Reid India (Manufacturing) Pvt. Ltd., 58, Taratalla Road, Garden Reach, Calcutta-24. Jyoti Ltd., Baroda-3. 13. Shri M. K. Patel British India Electric Cons-14. " N. Krishnan truction Co. Ltd., 6, Mayurbhani Road, Calcutta-23. Hindustan Electric Co. Ltd., 15. .. T. V. A. Krishnan Faridabad, East Punjab. Electric Construction and 16. " L. P. Shah Equipment Co. Ltd., Kaliprasanna Singhee Rd., Calcutta-2. Associated Electrical Indus-17. " D. G. Goverdhan tries Manufacturing Co. Pvt. Ltd.; and

Associated Electrical Industries (India) Private Ltd., Crown House, 6, Mission

Row, Calcutta-1.

18. Shri B. S. Bhagwatt . 19. " W. P. Karnik .	: } Representing	National Electrical Industries Ltd., Industrial Estate, Lal- baug, Bombay-12.
20. ,, V. Guruswamy	,,	Eastern Electrical Co. Pvt. Ltd., Post Box No. 21, Singanallur, Coimbatore-5.
21. " P. V. Mehta .	"	Alpha Electric and Engineering Co., 30, Calicut Street, Ballard Estate, Bombay-1.
22. ,, M. B. Bajaj .	,,	Hind Electric, Shroff Wadi, Opp. Mazgaon Post Office, Bombay-10.
23. ,, P. R. Deshpande 24. ,, D. K. Sinha .	: } "	Indian Electrical Manufacturers' Association, India Exchange (7th Floor), Caleutta-1.
.25, " M. S. Kapadia		Small Scalc Electric Motor Manufacturers' Association, C/o Batliboi & Co., Forbes Street, Fort, Bombay-1.
A 1	IMPORTERS	
1. Shri S. P. Mathur .	. Representing	Siemens Engineering and Manufacturing Co. of India Pvt. Ltd., Stadium House, Veer Nariman Road, Bombay-1.
2. " S. T. Naik .	सन्दर्भव नयन	Mather and Platt Ltd., Hamilton House, Graham Road, Ballard Estate, Bombay-1.
	CONSUMERS	
1. Shri I. A. Moses . 2. " R. L. N. Vijayana	. Representing	The Millowners' Association, Elphinstone Building, Veer Nariman Road, Bombay-1.
3. " M. K. Gupte	• • •	The Gold Mohur Mills Ltd., Dadar, Bombay-14.
4. " A. R. Parekhji	• • ,,	The Shree Niwas Cotton Mills Ltd., Delisle Road, Bombay-13.
R	AW MATERIAL SUPPI	LIERS
 Shri V. S. Deshpande , N. R. Banerjee , Alakwadi Mr. F. R. Lasyman 	Representing	Sankey Electrical Stampings Private Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay-1.

5. Shri S. N. Sircar . 6. ,, S. R. Subbaraman		}	Representing	The Tata Iron and Steel Co. Ltd., Bombay House, Bruce Street, Bombay-1.
7. " C. V. Panshikar		•	,,	The Indian Cable Co. Ltd., 9, Hare Street, Calcutta-1.
8. " R. Aggarwal	•	•	**	Devidayal Cable Industries Private Ltd., Gupta Mills Estate, Reay Road, Bom- bay-10.
9. " B. K. Maheswari	•	•	27	National Engineering Industries Ltd. (Bearing Division), Jaipur.
G0	VEI	RNM	IENT DEPART	TMENTS
1. Shri K. N. Ramaswamy	•	٠	Representing	Development Wing, Ministry of Commerce and Industry, Udyog Bhavan, Maulana Azad Road, New Delhi.
2. " S. L. Sharma .	•	1		Development Commissioner, Small-Scale Industries, Udyog Bhavan, Maulana Azad Road, New Delhi.
3. Lt. Col. O. G. Eapen	•	• 1		Iron and Steel Controller, 33, Netaji Subhas Road, Calcutta-1.
4. Shri R. Natarajan .	•			Director-General of Supplies and Disposals, National Insurance Building, Par- liament Street, New Delhi.
5. ,, D. S. Godbole 6. ,, P. K. Raut	:	}	P의 타디 아리카 "	Director of Industries, Government of Maharashtra, Sachivalaya Annexe, Bombay-32.
7. " B. M. Safiulla	•	•	"	Government of Mysore, Bangalore.

APPENDIX IV

(Vide Paragraph 6.1)

Statement showing the present annual installed capacity of electric motor manufacturing units

Sl. No.	Name of the unit		Annual installed capacity on single shift (H.P.)
1	2		3
1.	Crompton Parkinson (Works) Pvt. Ltd., Bombay		216,000
2.	Associated Electrical Industries Mfg. Co. Pvt. Ltd., Calcutta		83,920
3.	National Electrical Industries Ltd., Bombay	•	20,000
4.	Kirloskar Electric Co. Ltd., Bangalore		180,000
5.	P. S. G. & Sons Charity Industrial Institute, Coimbatore .		42,000
6.	British India Electric Construction Co. Ltd., Calcutta .	•	26,320
7.	Electric Construction and Equipment Co. Ltd., Calcutta .	•	10,000
8.	Bharat Bijlee Ltd., Bombay		3 6,000
9.	Jyoti Ltd., Baroda		99,000
10.	General Electric Co. of India (Mfg.) Pvt. Ltd., Calcutta .		80,000
11.	Motor and Machinery Manufacturers Ltd., Calcutta .	•	66,000
12.	Hindustan Electric Co. Ltd., Bombay (Factory-Faridabad)	•	65,200
13.	Argus Engineering Co. Ltd., Coimbatore		6,000
14.	Eastern Electrical Co. Ltd., Coimbatore	•	12,000
15.	Orient General Industries Ltd., Calcutta		20,000
16.	P. Govindaraj & Sons (P) Ltd., Madras		6,000
17.	Ogale Glass Works Ltd., Ogalewadi		600
18.	Ramakrishna Mission Vidyalaya Industrial Section, Coimbato	re	5,000
19.	Best & Co. Pvt. Ltd., Madras	•	20,000

1	2						3
20.	Jay Chand Engineering Works, Coimba	ore				•	3,000
21.	Coimbatore Premier Corporation Pvt. L	td., (Coimb	atore			9,000
22.	Engineering Products of India, Bombay	•	•	. '			36,000
23.	Broadway Engineering & Transport Co.	, Coi	mbato	re		<i>.</i>	5,000
24.	Karthikeya Foundry, Coimbatore	•,	•				5,000
25.	Vijaya Foundry, Coimbatore			•	•	٠,٠	9,000
26.	Beegee Corporation (P) Ltd., Patiala						70,000
27.	Texmo Industries, Coimbatore .			•	•	•	5,000
		ł.		T	OTAL		1,136,040



APPENDIX V (Vide Paragraph 6.3)

I-Statement showing production of electric motors during 1958

zi 2	Name of the firm	Upto 30 h.p.	. ф.	Above 30 to 50 h.p.	0 to 50 2.	Above	Above 50 to below 100 h.p.	100 to below 200 h.p.	þelow p.	200 h.p. and above	and ve	Total	, =-
		H.P.	Nos.	H.P.	Nos.	H.P.	Nos.	H.P.	Nos.	H.P.	Nos.	H.P.	Nos.
-	2	3	4	5	9	7	ço	6	10	=	12	13	. 14
•••	Associated Electrical Industries Manufac- turing Co. Pvt. Ltd., Calcutta.	32,345	4,999	1,824	± 64	1,333	<u>&</u>	120	1	•	• •	35,622	5,058
7	Crompton Parkinson (Works) Pvt. Ltd., Bombay.	114,839	19,272	5,151	\$ 11 \$ 11	315	9	enicus.	:	:	:	120,305	19,402
8	Kirloskar Electric Co. Ltd., Bangalore.	155,251	22,995	22,405	-534	14,620	201	2,170	15	:	•	194,446	23,745
4	National Electrical Industries Ltd., Bombay.	8,633	2,272	:	:	:	:	:		: ′	:	8,633	2,272
v	The General Electric Co. of India (Manu- facturing) Pvt. Ltd., Calcutta.	37,522	5,447	3,860	&	65	,	:	:	:	:	41,447	5,536
9	6 Jyoti Ltd., Baroda .	34,448	7,282	2,880	29	1,680	25	009	4	225		39,833	7,379
_	Motor and Machinery Manufacturers Ltd., Calcutta.	43,030	7,609	.:	:	:	:	:	:	:	: ' '	43,030	¥609

0,420	4,836	840	913	5,468	337	4,890	576	335	3,273	146	1,337	100,372
767,63	25,788	3,996	5,942	44,754	2,386	28,071	395	1,707	8,748	480	6,268	641,083 10
: .	:	:	:	:	:	:	:	:	:	:	:	
:	:	;	:	:	:	:	.:	:	:	:	:	225
•	:	·:	:	:	:	:	:	:	:	. •	:	8.
:	:	:	-:	:	:	:	:	:	:	. :	*	2,890
	m	;	:	:					:	: : :		253
•	180	:	:	•					:	:	•	18,193
:	56	:	: 1	11		2			:	:	:	106
•	1,095	:	•	34	: 3	410	i : 12	3 √ Fi:	:	:	:	38,005
, , , , , , , , , , , , , , , , , , ,	4,807	840	913	5,457	337	4,880	376	335	3,273	146	1,337	99,197
	24,513	3,996	5,942	44,314	2,386	27,661	395	1,707	8,748	480	6,268	581,710
rity Industrial Insti- tute, Coimbatore.	Bharat Bijlee Ltd., 2 Bombay.	Eastern Electrical Co. Ltd., Coimbatore.	Electric Construction and Equipment Co. Ltd., Calcutta.		Argus Engineering Co. Ltd., Coimbatore.	Hindustan Electric Co. 2 Ltd., Bombay.	The India Electric Works Ltd., Calcutta.	P. Govindaraj and Sons Pvt. Ltd., Madras.	Orient General Indus- tries Ltd., Calcutta.	Ogale Glass Works Ltd., Ogalevadi.	Coimbatore Premier Corporation Private Ltd., Coimbatore.	TOTAL 58
0	₹	2	=	12	13	14	13	9	11	00	61	

II—Statement showing production of electric motors during 1959

<u> </u>	Name of the firm	Upto 30 h.p.	0 h.p.	Above 30 h.p.	to 50	Above 50 to below 100 h.p.	50 to 30 h.p.	100 to below 200 fi.p.	below h.p.	200 h.p. & above	% .c. e	Total	Te .
	:	H.P.	Nos.	H.P.	Nos.	H.P.	Nos.	H P.	Nos.	H.P.	Nos.	H.P.	Nos.
		•	4	\$,	9	7	∞	6	10	=	. 12	13 ·	7
-	Associated Electrical Industries Manufacturing Co. Pvt. Ltd., Calcutta.	38,918	5,381	स रूपेन नय	81			:	:			43,462	5,487
7	Crompton Parkinson 122,873 (Works) Pvt. Ltd., Bombay.	122,873	23,471	6,645	159	099	8	:	:	:	:	130,178	23,638
æ	Kirloskar Electric Co. Ltd., Bangalore.	Co. 105,815	14,352	26,451	636	22,210	, 321	6,110	40	:	·:	160,586	15,349
4	National Electrical Industries Ltd., Bombay.	6,653	1,550	:	:	-:	:	:	:	:	. :	6,653	1,550
10. ,	The General Electric Co. of India (Manufacturing) Pvt. Ltd., Calcutta.	40,397	5,876	3,975	8	1,255	50	:	:	: `	:	45,627	5,981

.7,756	7,016	7,859	3,423	989	1,019	4,605	73	3,773	199	558	
49,386	22,071	31,152	20,596	3,058	3,626	35,557	481	22,914	491	2,989	The same of the sa
:		:	:	:	:	:	:	•	*	:	
:	:	:	•	:	:`	:	•		:	:	
90	**************************************	*	:	:	:	:	:	. =	· :	· :	
1,225	!	:	:	:	:	:	:	150	• • ,	•	
45	:	:	9				•	, .	:	•	
3,680	:	:	255	: 6			·: .	:	:	•	
146	:	:	26	: 45		8	:	15	:	:	
7,380	:	:	2,244	:	स्थापनः सर्वेपनः	2,340	:	200	:		
7,557	7,016	7,859	3,361	, 989	1,019	4,546	73	3,757	961	558	
37,101	22,071	31,152	18,097	3,058	3,626	33,217	481	22,064	491	2,989	
6 Jyoti Ltd., Baroda	Motor & Machinery Manufacturers Ltd., Calcutta.	P. S. G. & Sons' Charity Industrial Institute, Coimbatore.	Bharat Billee Ltd., Bombay.	Eastern Electrical Co. Ltd., Coimbatore.	11 Electric Construction & Equipment Co. Ltd., Calcutta.	British India Electric Construction Co. Ltd., Calcutta.	Argus Engineering Co. Ltd., Coimbatore.	Hindustan Electric Co. Ltd., Bombay.	15 The India Electric Works Ltd., Calcutta.	16 P. Govindaraj & Sons Pvt. Ltd., Madras.	
9	-	.00	0	10	-	12	13	14	12	16	

Statement II—contd.

14	*2,140	:	1,754	377	32	375	388	95,113
13	1,320	:	8,163	1,757	1,982	Z.	N.A.	592,049
12	:	:	:	:	:	:	•	:
=	:	:	•	:	:	:	•	:
10		:	:	:	:	:	:	64
6	:	. :	-b	- Company	:	:	•	7,485
, ∞	:	:	: 6			:	:	400
7	:	: -	-:	rii de		:	** * .	28,060
9	:	:			:	:	•	1,262
N.	:	:	:	त्राचेच नम्	ন :	•	:	54,279
4	2,140	:	1,754	377	24	375	388	93,402
.	1,320	:	8,163	1,757	1,982	N.A.	N.A.	502,225
2	17 Orient General Indus- tries Ltd., Calcutta.	Ogale Glass Works Ltd., Ogalevadi.	Coimbatore Premier Corporation Pvt. Ltd., Coimbatore.	Sri Ramakrishna Mission Vidyalaya Industrial Section, Coimbatore.	21 Broadway Engineering & Transport Co., Coimbatore.	22 Engineering Products Pvt. Ltd., Bombay.	Vijaya Foundry, Coimbatore.	TOTAL
-	17	38	92	90	77	23	23	

- 5	Name of the Firm	I Into	30 12 22	4.1				, ,			-		
į ė	radiid of the rulli	oido	Opto 30 ft.p.	Above 30 to 50 h.p.	0 to 50	Above 50 to below 100 h.p.	50 to 30 h.p.	100 to below 200 h.p.	below h.p.	200 h.p. and above	and :	Total	TE
		H.P.	Nos.	H.P.	Nos.	H.P.	Nos.	H.P.	Nos.	H.P.	Nos.	H.P.	Nos.
. —		က်	4	5	9	7	∞	6	10	=	12	13	14
-	Associated Electrical Industries Manufacturing Co. Private Ind. Calcutta.	44,621	4,979	3,734	02	3,024	£		:- *	:	:	50,879	5,092
7	Crompton Parkinson (Works) Private Ltd., Bombay.	125,406	25,605	4,334	105	1,725	26	. :	:	:	:	131,465	25,736
m	Kirloskar Electric Co. Ltd., Bangalore.	109,350	18,672	23,505	557	24,525	347	6,409	46	655	7	164,525	19,624
4	National Electrical Industries Ltd., Bombay.	5,863	1,873	•	:	:	:	:	:	:	:	5,863	1,873
'n	The General Electric Co. of India (Manu- facturing) Private Ltd., Calcutta.	37,485	4,869	8,015	185	2,150	33	:	•	:	:	47,650	5,087
9	Jyoti Ltd., Baroda .	24,992	5,642	7,774	228	5,125	11	2,090	15	420	7	40,401	5,958

Statement III—contd.

2	4	_	2	9	7	∞	6	10	=	12	13	14
14,564 6,735	35		·	:	:	:	•	:	. :	:	14,564	6,735
21,297 5,942	42		•	:	•	:	•	:	:	:	21,297	5,942
16,951 3,755	22		610	15	180	m	•	:	:	:	17,741	3,773
3,625 807	71		117 117		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		:	:	:	:	3,625	807
5,979 1,251	15		गण म				:	:	:	:	5,979	1,251
30,538 3,950	8		,475		, (60	0	:	:	:	:	33,673	4,021
284 46	Q			:	:	:	:	:	:	:	284	4
12,377 2,050	0		820	92	160	7	120	-	:	:	13,477	2,073
2,018 448	99		:		:	:	:	:	•	•	2,018	448
4,078 8,133	m		:	:	:	: .	;	:	:	:	4,078	8,133
1,490 319	σ.				:	:	:	:	:	:	1,490	319

4 612,171 108,235

62 1,075

514,080 106,393 50,767 1,241 37,549 535 8,700

TOTAL

3,277.	1,290	1,376	910	454	1,532	:	N.A.	2,331	147
7,846	4,420	3,050	2,653	1,560	996'9	. s.	17,000	0006	299
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, :	:	•	:	84.7	THE ST	या	:	:	•
3,277	1,290	1,376	910	454	1,532	:	Z.A.	2,331	147
7,846	4,420	3,050	2,653	1,560	996'9	:	17,000	9,000	199
Ο.	Ltd., Colmoatore. Sri Ramkrishna Mission Vidyalaya Industrial Section, Coimbatore.	Broadway Engineering and Transport Co., Coimbatore.	-		23 Best and Co. Private Ltd., Madras.	Sri Jaychand Engineering Works, Coimbatore.	25 Beegee Corporation Private Ltd., Patiala.	Texmo Industries, Coimbatore.	X
18	19	8	21	ä	23	24	25	76	27

APPENDIX VI

[Vide Paragraph 10.2]

Statement showing rates of excise duty on Electric Motors and parts thereof

Electric Motors all sorts and parts thereof namely :-	
(1) those designed for use in circuits of less than 10 amperes and at a pressure not exceeding 250 volts.	Fifteen per cent. ad valorem.
(2) those designed for use in circuits at a pressure exceeding 400 volts and	
(i) with a rated capacity not exceeding 10 H.P	Ten per cent. ad valorem.
(ii) exceeding 10 H.P •	Five per cent, ad

Notes.—1. By the Ministry of Finance (Department of Revenue) Notification No. 117/60-Central Excises, dated 24th September, 1960, the Central Government has exempted electric motors having current consumption of not more than 2.5 watts per hour and ordinarily meant for fitting as integral part of electric clocks, from the whole of the excise duty leviable thereon.

2. By the Ministry of Finance (Department of Revenue) Notification No. 84/60-Central Excises, dated 10th June, 1960, the Central Government has fixed the tariff values for electric motors of the single or split phase type as per the following schedule:—

SCHEDULE

Item No. under First Schedule to the C. E. & Salt Act, 1944 under which the article is charge- able		Horse Power of electric motor 4	Tariff value
	l	2	3
	31(1) .	(i) Motors not exceeding 1/20 H.P.	Rs. 110
1		(ii) Exceeding 1/20 H.P. but not exceeding 1/12 H.P.	120
Ĭ.	r	(iii) Exceeding 1/12 but not exceeding 1/6 H.P.	130

1	2			3
	(iv) Exceeding 1/6 but not excee	ding 1/3 H.	P	Rs. 160
	(v) Exceeding 1/3 but not excee			200
	(vi) Exceeding 1/2 but not less the		Ε.	260
	(vii) Motors of 1 H.P.			300
(viii) Exceeding 1 H.P. but not ex	ceeding 2 H	i.p. ·	400
be the continue 996-1959. 3. By the M	e horse power is equivalent to nuous rating in accordance with	Indian Stand	dard Specification (1997) dark specification	cation No
85/60-Central Ex	cises, dated 10th June, 1960, the phase squirrel cage electric mot SCHEDULE	Central Go	vernment ha	as fixed th
Item No. under First Schedule to the C. E. &	Horse Power of electric motor	Synchrono	ous speed an values	d tariff
Salt Act under which the article is ordinarily chargeable	Troise rower of electric motor	Exceeding 1400 R.P.M.	Exceeding 900 R.P.M. but not exceeding 1400 R.P.M.	Not exceeding 900 R.P.M.
	(ma) (1) 2 (m)	Tariff	values per r	motor
1	2 관리되다 하나구	3	4	5
31(2) (i) .	(i) Not exceeding 1 H.P	Rs. 300	Rs. 350	Rs 40
	(ii) Exceeding 1 H.P. but not exceeding 2 H.P.	350	400	50
	(iii) Exceeding 2 H.P. but not exceeding 3 H.P.	400	480	60
	(iv) Exceeding 3 H.P. but not exceeding 4 H.P.	450	550	65
	(v) Exceeding 4 H.P. but not exceeding 5 H.P	520	620	75
	(vi) Exceeding 5 H.P. but hot			00
	exceeding 6 H.P	600	700	80

1	2	3	4	5
		Rs.	Rs.	Rs.
31(2)(ii)	. (viii) Exceeding 8 H.P. but not exceeding 10 H.P	800	1,000	1,200
	(ix) Exceeding 10 H.P. but not exceeding 13 H.P	1,000	1,200	1,400
	(x) Exceeding 13 H.P. but not exceeding 15 H.P	1,100	1,300	1,600
	(xi) Exceeding 15 H.P. but not exceeding 20 H.P.	1,400	1,700	2,000

Explanation.—The horse power is equivalent to 0.7457 kilowaits. The rating shall be the continuous maximum rating in accordance with Indian Standard Specification No. 325-1959.

4. By the Ministry of Finance (Department of Revenue) Notification No. 116/60-Central Excises, dated 24th September, 1960, the Central Government has fixed the tariff values for 3 phase squirrel cage motors of less than ½ h.p. as per the following schedule:—

SCHEDULE

Item No. under First Schedule to the C. E. and Salt Act, 1944 under which the article is char- geable	Horse Power of the Electric Motor	Tariff value
31(2)	(i) Motors not exceeding 1/20 h.p	Rs. 110
	(ii) Exceeding 1/20 h.p. but not exceeding 1/12 h.p	120
	(iii) Exceeding 1/12 h.p. but not exceeding 1/6 h.p	130
	Exceeding 1/6 h.p. but not exceeding 1/3 h.p.	160
	(v) Exceeding 1/3 h.p. but less than 1/2 h.p	200
Explanation Th	has harse namer is equivalent to 0.7457 kilowetts. The r	ating shall

Explanation.—The horse power is equivalent to 0.7457 kilowatts. The rating shall be the continuous maximum rating in accordance with Indian Standard Specification No. 325-1959.

^{5.} Under Government of India, Ministry of Finance (Department of Revenue), Notification No. 28/60-Central Excises, dated the 1st March, 1960, as subsequently amended by Notification No. 71/60-Central Excises, dated the 28th May, 1960, all parts of electric motors other than stators and rotors, are exempt from the payment of the excise duty leviable thereon.

6. Under Government of India, Ministry of Finance (Department of Revenue), Notification No. 68/60-Central Excises, dated the 20th April, 1960, electric motors, all sorts, upto the quantity prescribed in column (1) of the table hereto annexed, cleared by any manufacturer for home consumption in a month, are exempt from the payment of the percentage of the excise duty specified in the corresponding entry in column (2) of the said table:

Provided that the exemption shall not apply to any factory which in any of the twelve months immediately preceding the month in which the clearance is made, has exceeded an output of 300 H.P. of such electric motors.

TABLE

Quantity	,		Amount	
(1)			 (2)	
On the first 100 H.P.	. *		20 per cent of the total duty.	
On the next 100 H.P.	•	•	10.per cent of the total duty.	



APPENDIX VII

[Vide Paragraph 11.2]

Summary of import control policy for the different types of electric motors and their parts since the licensing period October '58—March '59

(a) Fractional h.p. motors including motors upto one h.p. suitable for D.C. supply or single phase

During October '58—March '59 licensing period established importers were granted a quota of 25 per cent for imports from soft currency areas. Licences were not valid for import of second hand machinery, although requests from users were considered on an ad hoc, basis. During the next licensing period (April—September '59) the same policy was continued but the quota for established importers was increased to 40 per cent. Further, quota licences were issued subject to the condition that sales were effected by established importers to actual users only, at prices not exceeding 25 per cent over the landed cost. The same policy was continued during October '59—March '60 and April—September '60 licensing periods. For the licensing period October '60—March '61 the quota for established importers was reduced to 25 per cent. The quota has been further reduced to 5% during the current licensing period.

(b) A. C. 3 phase, squirrel cage motors upto 30 h.p. conforming to details of construction and design as given below and slipring motors from 10 to 30 h.p. (i) Type—Standard/High Torque (including loom motors)/Smooth acceleration (ii) Voltage—200—550 (iii) Spindle—Horizontal or vertical (iv) Enclosure—Screen protected/dripproof totally enclosed (including fan cooled)

During October '58—March '59 licensing period no licences were granted to established importers for this item. But these types of motors were allowed clearance with machinery and equipment provided the motor shaft was directly coupled to the driving mechanism and the motors could be regarded as integral, or were built-in, built-on, flanged or geared so as to form an integral driving mechanism with the plant and machinery. Applications from pump manufacturers requiring vertical spindle hollow shaft motors of ratings not produced in the country were considered ad hoc. Actual user applications from collieries for flame-proof motors conforming to B.S.S. 741 of 1937 or its equivalent were considered, in consultation with the Development Wing, for import of flame-proof motors conforming to B.S.S. 741 of 1937 or its equivalent. The same policy has been continued during all the subsequent licensing periods.

(c) Motors of the types mentioned in (b) but from 31 to 50 h.p.

During October '58—March '59 licensing period no licences were granted to established importers for this item. But these were allowed clearance with machinery and equipment on the same conditions as set out for (b) above. Applications from actual users for import of flame-proof motors conforming to B.S.S. 741 of 1937 or its equivalent were considered in consultation with the Development Wing. The same policy has been continued in all the subsequent licensing period.

(d) Other types of motors

During the licensing period October '58—March '59 no licences were granted to established importers. Applications from actual users were considered, in consultation with the Development Wing, only for import of flame-proof motors conforming to B.S.S. 741 of 1937 or its equivalent. Applications from established importers for

import of spare parts against their imports of complete machinery were considered by the licensing authorities and licences were granted on a quota of $2\frac{1}{2}$ per cent. of half of their best year's imports in the basic period, subject to the same conditions/ restrictions as applied to licences issued for parts of motors. During the next licensing period (April—September '59) the same policy was pursued. Further, actual user applications from the textile industry for import of variable speed motors were considered on an ad hoc basis on the recommendations of the Textile Commissioner and in consultation with the Development Wing. The policy remained the same for the next three licensing periods except that during April—September '60, licences for spare parts were issued on an annual basis. During the current licensing period (April—September '61) the facility of actual user licences to the Textile industry has been extended to cover other non-flame proof motors not available locally.

(e) Parts of motors

During the licensing period October '58—March '59 established importers were granted a quota of 50 per cent. for imports of parts or alternatively 5 per cent. on imports of complete motors from dollar and soft currency areas. Licences were not valid for import of spare parts such as ball bearings, etc. This policy has been continued during all the subsequent licensing periods. Further, with effect from the April—September '59 licensing period, applications from sole selling agents of variable speed motors, who were not quota-holders of this sub-item for import of spare parts of motors, were considered ad hoc on the recommendations of the Textile Commissioner. With effect from October '59—March '60 licensing period, established importers were granted a quota of 60 per cent. for imports of parts and actual user applications from manufacturers of fractional horse-power motors for the import of condensers and centrifugal switches were considered on an ad hoc basis. With effect from April—September '60 licensing period, licences were issued subject to the condition that they would not be valid for import of motors in CKD condition. Further, licences were issued on an annual basis.

